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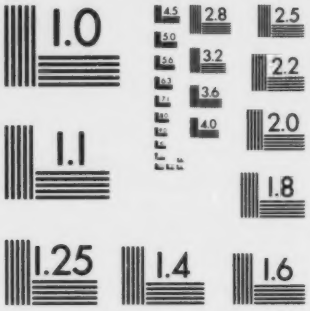

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1985

Report of the Ninth Assembly of Environment Councils of Canada

The St. Lawrence River and Environment

Developing a Provincial Conservation Strategy

Conseil consultatif de l'environnement

Québec

88-02976/

REPORT OF THE NINTH ASSEMBLY

OF ENVIRONMENT COUNCILS OF CANADA

QUEBEC CITY, OCTOBER 10 AND 11, 1985

INTRODUCTION

It gives me great pleasure as host of the last assembly of environment councils, held October 10 and 11, 1985, in Quebec City, to provide each delegation with a copy of the conference proceedings.

I would like to take this opportunity to express my deep gratitude to the Government of Canada for undertaking the English transcription of most of the texts in this report. I would also like to thank Max McConnell, Executive Secretary of the Canadian Environmental Advisory Council, who over the past year has followed up on this matter with our secretary, Camille Rousseau.

Marcel Junius, Chairman
Conseil consultatif de l'environnement du Québec

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* Office for Public Hearings on the Environment.

LIST OF PARTICIPANTS AT THE NINTH ASSEMBLY OF ENVIRONMENT COUNCILS OF CANADA

CANADA	Canadian Environmental Advisory Council
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NEW BRUNSWICK	Environmental Council of New Brunswick
	Louis LaPierre, Chairman Maurice Clavette, Member Don Smith, Member Helen Taylor, Member
NOVA SCOTIA	Nova Scotia Environmental Control Council
	Morris Haugg, Executive Secretary Donna McCready, Research Co-ordinator
MANITOBA	Manitoba Environmental Council
	Diane Malley, Chairman Ian Rollo, Vice-Chairman
ALBERTA	Environment Council of Alberta
	Alistair D. Crerar, Chairman Dave Buchwald Archie Landals
ONTARIO	Ministry of Environment
	Gary Gallon, Senior Adviser to the Minister of Environment David Guscott, Adviser, Office of the Deputy Minister of Environment

QUEBEC

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* St Lawrence enhancement secretariat

1. WELCOME ADDRESS

WELCOME ADDRESS

Marcel Junius, chairman of both the conference and the Conseil consultatif de l'environnement du Québec, extended a warm welcome to all those in attendance. He went on to say that, in light of the importance of the topics to be discussed, he felt it would be appropriate to issue a press release, something that had not been done at previous conferences. The release would state that Québec was hosting the ninth assembly of Canadian environment councils, and would identify the themes of the conference, namely a case study of the St Lawrence, and the provincial conservation strategy (copy of release in Annex 1).

Mr Junius continued:

> This address marks the start of the ninth assembly of Canadian environment councils. Il am truly delighted to serve as chairman for this gathering.
>
> On behalf of the Conseil consultatif de l'environnement du Québec and for my own part as well, I wish all of you a pleasant stay, fruitful discussions and a productive conference.
>
> And of course we are very proud to have you here in Quebec City, the provincial capital and home of French culture in North America. This historic city is as dynamic as ever and grows more vital with each passing year. You will recall that in 1983 we celebrated the 375th anniversary of Samuel de Champlain's arrival in North America and the subsequent founding of Quebec City. This year, we are marking the 450th anniversary of Jacques Cartier's voyage to these shores.
>
> A great many events have taken place since then, along the river, in the city and in the surrounding countryside. Man the builder has transformed Quebec City into a jewel.

As you walk through the city, you will see at every turn the historic reminders that are etched in the stones as they are in our traditions.

This French presence in North America will be reflected in our discussions, and it goes without saying that these discussions will be enriched by the bountiful resources of our two cultures.

In this spirit of co-operation, I am pleased to welcome the following representatives and delegates to this conference:

- representatives of the Canadian Environmental Advisory Councils;
- representatives of the Environmental Council of New Brunswick;
- representatives of the Nova Scotia Environmental Control Council;
- representatives of the Manitoba Environmental Council;
- representatives of the Environment Council of Alberta;
- delegates from the Ontario Ministry of Environment;
- representatives of the Bureau d'audiences publiques sur l'environnement;
- our colleagues from the Secrétariat à la mise en valeur du Saint-Laurent; and
- my colleagues from the Conseil consultatif de l'environnement du Québec.

To all of you, welcome to Quebec City!

I would also like to mention those who could not, unfortunately, be with us this morning. In this regard, I would like to see measures taken by the council chairmen to ensure that these people, who have an interest in our work, are given financial support by a central agency so that at least one observer can attend our annual meetings.

Regrettably, representatives of the following departments are absent from this conference:

- the British Columbia Ministry of Environment;
- the Newfoundland Department of Environment;
- the Prince Edward Island Department of Community and Cultural Affairs;
- the Saskatchewan Department of the Environment;
- the Yukon Department of Renewable Resources; and
- the Northwest Territories Department of Renewable Resources.

With respect to this ninth assembly, I would like to remind you that while we have come here to work, we should use this occasion to enrich our cultural ties. We have gathered here in the historic heart of the province of Québec, the centre of a region that is particularly blessed with natural charms and beautiful scenery. To allow you to take advantage of this, we have planned an outing for Saturday, October 12.

We will begin the two working days by focussing our attention on a study of the St Lawrence, a magnificent river and a great, internationally recognized cultural resource.

Against this backdrop - a setting that unfortunately is afflicted with many different types of pollution - we will examine possible ways of ensuring a brighter future for our natural resources and better use of those resources by man. We will consider these options through a provincial conservation strategy, which will be the main theme arising out of the earlier analysis of the great St Lawrence basin.

In this area, I believe we have common interests since we also have common concerns. However, the hope that dwells within us will emerge during the workshop discussions as we try to put our aspirations into actual words. It is easy to see from the reports of earlier

assemblies that we all want policies that show respect for the environment and hold promise for Canadians living in both urban and rural areas. The question is how to go about this in 1985, given current socio-economic conditions.

Here in the late 20th century, we, like Marshall McLuhan, can look behind us and see the road modern man has travelled, although it is very difficult to guess what lies ahead. At the dawn of this century, the world marvelled over great discoveries; industry and machines became the new masters, and along with them, profit. It was the start of a great upheaval in values. The management class emerged, subsequently giving rise to the development of workers' unions. It was a time marked by frenetic factory work, the absence of health protection in the workplace and, all too often, in the worker's home, and a lack of respect for the environment.

Only a few glimmers of hope remained among leading scholars who claimed that the quality of life was also important, and among romantics who advocated respect for nature and stressed the value of flowers and trees. At certain points in our history, the "gardeners" were replaced by others who transformed the days of innovation into a time of war and indescribable human tragedy. With the restoration of peace, we embraced the ideal of growth at any price - an ideal that set little store by and left little room for the quality of the environment.

This situation gave rise to a counter-offensive by the ecology movement. Finally, in keeping with a new awareness of the solidarity of mankind, the dialogue on environment was being heard. It was these years of contrast that gave us Hiroshima, Three Mile Island, PCB spills, pollution in the Great lakes, acid rain and all the other disasters that have befallen both man and nature. These same years spawned demands that led to protests and demonstrations in support of the greatest causes. Causes like Bhopal, and peace.

Despite the ever-increasing number of incidents and accidents caused by ignorance, inexperience or unawareness, it is the hope of a new society and a new social justice centred on a balance between man the innovator and nature which remains our prime concern.

And what of our own situation? In talking with some of you earlier, I got the impression that all the provinces, each with its own individual approach, are expressing similar views and comments and offering similar suggestions to the officials of the day in order to ensure that environmental improvement is not relegated to the bottom of the list of government priorities.

I must, therefore, say a word or two about the efforts the Québec government has made since 1972 to maintain an acceptable degree of civility in relations between the state and the people with respect to the environment.

Let us begin by looking at what has happened over the past few years. First, there was former premier René Lévesque's last throne speech, which outlined government projects referred to as "blue spaces". to those - and there were a lot of them - who dreamed of crystal-clear water and shorelines free of environmental problems, these projects were cause for hope. I will come back to this later.

Back in 1977, the Québec government decided to abolish the exclusive rights of private hunting and fishing clubs. At the same time, it created sixty-six zones for controlled hunting and six zones for controlled salmon fishing.

In 1978, the government passed the Act to preserve agricultural land, followed a year later by the Act respecting land use planning and development. Two important pieces of legislation to ensure a better environment.

A more current topic, and one that will be dealt with in a workshop this afternoon, is the "St Lawrence Project", which was officially

launched by the government in 1982. A great number of people have since taken part in the project, including two who are with us here today. I am referring to Jean Gagnē and Lēonce Naud of the Secrētariat à la mise en valeur du Saint-Laurent.

Under the Archipel National Park plan - an ambitious project in that it involved the entire Montreal area - efforts were made to sell municipalities and the public on the blue spaces announced by the premier. This project deserves a few moments' consideration, since it covers 400 square kilometres of aquatic environment stretching from Carillon to Repentigny: three lakes, three rivers, twenty-five sets of rapids, 325 islands, 1000 kilometres of shoreline, ninety-three species of fish, twenty of which support either a commercial or a sport fishery, and 260 known species of birds. All this in greater Montreal alone, an area with a population of more than two million. The general objectives of the project are to:

- restore access to the shoreline and the water;
- protect the flora and fauna; and
- develop the islands' vast recreational potential.

In this unique urban setting, degradation of water quality has put an end to many water-related activities. For example, of the fifty beaches that were clean and accessible in 1960, only three were still open to the public in 1984. In many places there is no access to the water. Backfilling and the dumping of waste and refuse on the river banks have uprooted plant and animal populations. The primary goal of the Archipel National Park project is to give these areas back to the people.

In the same vein, the Department of Environment has set up a number of water purification projects, and this year it launched the "Berges neuves" [new shores] program, the objective of which is to get municipalities interested and involved in cleaning up riverbanks

waterways and lakes so that the shoreline can at last be rehabilitated. I will let my colleague, Andrē Beauchamp, chairman of the BAPE, elaborate on this, if he sees fit.

For its part, the Department of Recreation, Fish and Game has written a draft policy on wildlife habitats, including wetlands, that should result in draft legislation. In this field, however, we can never take anything for granted. We must always await the final outcome.

In the midst of these major undertakings - just so many steps on the path of hope - we must not forget the creation of the Bureau d'audiences publiques sur l'environnement, the BAPE, in 1978, or the establishment of the Department of Environment a year later. The BAPE has since performed a public consultation function that had previously been assumed by the advisory council with much fewer resources and on a considerably smaller scale.

With respect to the other areas in which the Department of Environment is involved, you probably saw in the papers that Québec was given a grade of B+ by the coalition on acid rain for its regulatory action and its program to fight the acid rain problem.

Two other important sets of regulations were recently adopted, one on the quality of drinking water, the other on the transportation and storage of hazardous waste.

This has been just a brief overview of the efforts that have been made. One might think from all this that everything is fine and we are perfectly satisfied, but believe me, nothing could be further from the truth! The environment still occupies only a tiny place in Québec's overall administrative machine; its faint voice does not carry very far. What we are seeking, sometimes in vain, is true anticipatory or preventive action on the part of the government with respect to the environment.

Under the present circumstances, we believe that governments still blindly follow society's other choices and objectives, despite mounting evidence that employment and environment are not incompatible. To take just one example, it is a known fact that tourism ranks among the top priorities in a country's development because of the economic activity associated with it. Unlike those who exploit natural resources, tourism promoters - governments included - rely heavily on the quality and enhancement of the environment.

The federal department's recent publication on the Canadian tourism strategy and the Québec tourism department's document entitled "Bilan et perspective d'action 1985-88" both made it clear that outdoor activities, parks, lakes, forest and open spaces form the very backbone of the industry and influence the image tourists have of Canada. Paradoxically, there is no mention whatsoever of the close relationship between the ideas covered in the reports and environmental concepts. Jacques Brignicourt wrote in "Le roi touriste" that "having spoiled their own environment, people in consumer society are quick to destroy the environment of others". I thought these last few words, taken from a text by Jacques Dumas of the Centre d'études en tourisme, seemed very appropriate, given the subject we will be discussing this afternoon. They capture perfectly the main problem we are faced with, which is the lack of interdepartmental co-ordination and the high level of indifference among departments toward conservation strategies.

On this last point, however, we have been advised that the Québec Department of Environment has been working on the tools needed to implement a provincial conservation strategy. We also know that the number of people assigned to this task remains small, and that very modest resources have been made available.

In closing, I would like to say to the other councils here that these meetings should be held annually and should be revitalized and revamped in the future. Perhaps we would be a little closer to one another if we exchanged or indicated a desire to exchange council

members or staff, in an effort to obtain available information a little more quickly. In short, we should take full advantage of the resources specific to one council or one individual and stay in closer touch throughout the year.

And finally, I would like to wish all my friends with the provincial councils, other organizations and the national council a great conference. Il hope that pooling our ideas will help us identify the best and most effective means of improving our environment.

2. ACTIVITY REPORTS BY COUNCILS AND PROVINCIAL REPRESENTATIVES

ACTIVITY REPORTS BY COUNCILS AND PROVINCIAL REPRESENTATIVES

1. Canadian Environmental Advisory Council

Mr Beck gave a brief summary in English of CEAC's activities since June 1983. Reproduced below is the complete text he tabled at the beginning of his address.

"Introduction

This report was prepared for tabling at the 1985 meeting of the federal and provincial Environment Councils. It is not a complete account of all CEAC's activities, but covers those aspects of Council's programme which will be of particular interest to representatives of other environment councils.

We will continue the pattern which we set at the 1983 assembly and report to you on a fiscal year basis. This report will cover 1983-1984 and 1984-1985 - our activities from April 1, 1983 to March 31, 1985. In some cases we have included a reference to current action on activities which are described in the report.

The Status of Council

There has been no real change in the status of Council, the manner in which we operate, or the functions which we perform. The discussion on the role of councils at the 1983 assembly, however, helped us to clarify our thinking regarding the role of CEAC. After preliminary discussions with the Minister, we prepared a detailed statement of our terms of reference, and they were approved by the Minister in April, 1984. They did not in any way change the role of CEAC, but they are a much more detailed and specific description.

Perhaps it is pure coincidence, or our efforts to clearly define our role may have sparked a rash of proposals for change. We hear of a new proposal every few weeks! Last month alone, there were recommendations for a new form of federal environment council in the report of the Royal Commission on Economic Union and Development Prospects for Canada (Macdonald Commission), and then in the report of the Inquiry on Federal Water Policy. It seems that everyone has a view on what the role of a federal environmental council should be. In the meantime, this Council concentrates on serving the purpose for which it was established: providing the federal Minister of the Environment with an alternative source of advice - an alternative to the "conventional wisdom of the bureaucracy" and to that of special interest groups.

Other councils may be interested to know that we developed "Guidelines on Conflict of Interest Situations". Members felt that guidelines were needed, because of the circumstances under which they served - as part-time and semi-voluntary advisers with other primary employment and with active roles in other organizations. The objective of the guidelines was to maintain the credibility of Council as an independant, knowledgeable body by avoiding not only the reality, but the perception of any conflict of interest.

The membership is at a relatively low level at the moment - only nine members instead of the usual 12, but we have managed to maintain good representation from the various regions of the country; from the various sectors of society; and from a variety of fields of expertise. We expect that Council will be strengthened by the appointment of some additional members very shortly.

While Council is authorized to have a maximum membership of 16, membership has generally been limited to 12, because of budgetary restraint. The limited budget also affects Council's activities, particularly meetings, because with members spread across the country, meetings are a major cost factor. During the past two years, there were 10 full council meetings and 11 meetings of the

Executive, and we are also making increased use of telephone conference calls.

Council has a limited public role which is mainly exercised through publications - reports of major studies and reviews of Council activities (annual reports.). Because of our limited resources, we have been coping with a backlog of publications for a few years. The good news is that last year we published six reports and we are now almost up-to-date. Two of those documents were directly related to these meetings of councils:

- Report of the Eighth Assembly of Environment Councils of Canada; and
- Selected Papers from Assemblies of the Environment Councils of Canada 1975-1980.

Highlights of Activities

This report will make only brief reference to a few of the subjects on which Council took action during the past two years. The full range of Council's programme is described in more detail in the 1983-1984 and 1985-1985 Review of Activities which we hope will be published within a couple of months.

Environment-Economy Relationships

You may recall that we had proposed a theme along these lines for discussion at the 1983 Assembly. It was and still is our view that the interactions between the environment and the economy and, in fact, the dependence of economic performance on environmental quality, is a subject of critical importance. Incidentally, we were pleased with the emphasis which the Macdonald Commission gave to this subject in its final report.

Council activities during the past two years which related to this subject included:

- a brief to the Macdonald Commission;
- two small workshop for preliminary discussion of the subject; and
- an in-depth study of environment-economy linkages (we are doing some further work on the study now and plan to publish a report later this year).

Public Consultation

One of the recommendations at the 1983 Assembly asked that all councils look at means for public input in the process of establishing and reviewing environmental standards. Work in this area was undertaken and is still underway through a "Consultation on Environment, Jobs and the Economy" project sponsored by the Niagara Institute and Environment Canada. We will try to obtain copies of relevant reports for your information.

Council itself undertook two specific actions during this period:

- a review and critique of the consultation arrangements between the Minister/Department and the Environmental Non-Governmental Organizations, including recommendations on funding and a greater regional focus; and
- an effort to improve consultation with business and industry, including an initial meeting with members of the Environment Committee of the Canadian Manufacturers' Association, and participation in the World Industry Conference on Environmental Management.

Health-Related Issues

We have grouped together, somewhat arbitrarily, several efforts by Council which had a particular focus on human health, althrough we

recognize that they also have a direct relationship to the health of the environment. They included:

- recommendations to the Minister regarding policy proposals on leaded gasoline;
- preparation of a discussion paper on acceptable risk in the environment field, which emphasized the ethical aspects and recommended public debate;
- preparation of an assessment of proposals for a "pesticides advisory board", which recommended, in particular, effective public representation; and
- identification of future environmental health research priorities.

Methods of Regulating and Enforcing Environmental Standards

One of the recommendations at the 1983 Assembly asked that this Council "undertake an investigation and review of alternatives to existing methods of regulating and enforcing environmental standards". It was indicated at the assembly that CEAC would probably not have the resources to undertake such a study itself. We have, however, obtained a discussion paper which reviews and assesses, to some extent, a range of alternatives. Copies of this paper, "Policy Tool Kit", will be mailed to all councils.

While recognizing that enforcement of regulations is not the only method of implementing environmental standards, Council has been concerned about enforcement practices under federal legislation; made recommendations to the Minister; and undertook a review of specific inadequacies.

Land Use and Soil Degradation

CEAC reported in 1983 on two studies commissioned on this subject. The following is a brief update:

- the overview report was published and received considerable attention in the media during the past summer;

- the in-depth study, with emphasis on economic aspects, was not completed to Council's satisfaction and it will not be published. A limited number of copies in manuscript form are being made available for reference.

Parks and Protected Areas

Council launched several projects in this area, including the following:

- a study of the economic aspects of national parks and the role of parks in northern Canada, leading to recommendations for the establishment of northern national parks in connection with the National Park Centennial;

- a critique of the draft policy for national marine parks, which included a recommendation for a complementary action plan; and

- a proposal for protection of the St. Lawrence River beluga population, including consideration of the area as a potential national marine park.

Forestry

One of the recommendations at the 1983 Assembly urged that the Science Council of Canada "make an effort to further integrate the environmental dimension in forest exploitation and explore the avenues of conservation, recovery and recycling of resources". CEAC wrote to the Science Council following the Assembly urging further work on the theme of an earlier Science Council report on "The Conserver Society"; recommended follow-up studies in the forestry field, e.g. the implications of widespread monoculture; and raised the possibility of studies by the Science Council in the area of environment-economy relationships.

Council also reviewed a complaint regarding environmentally undesirable use of federal funds provided for provincial forestry programmes and recommended to the Minister that federal funding be used to encourage long-term resource planning, professionnal forest management and protection of the environment.

Water

Council activities in relation to water management and water quality included the following:

- a recommendation to the Minister urging provision for public participation in the development of drinking water quality standards; and
- a discussion with members of the Inquiry on Federal Water Policy, with a particular focus on the means of implementing a public education and consultation programme.

Science Policy

Council continued its periodic reviews of the adequacy of federal efforts in the environmental sciences. It urged that a priority in funding be given to maintenance of the knowledge base and scientific capacity and stressed the importance of liaison with the broad scientific community. (A further review was completed and forwarded to the Minister this year and we will undoubtedly have more to say on this subject in the future).

State of the Environment Reports

Strong support has been given for several years to efforts by Environment Canada to develop a "State of the Environment Report". Council reviewed progress reports and draft material during the past

two years. (It now appears that Canada's first State of the Environment Report will be published within a few months).

Conclusion

This report would not be complete without noting that there appears to be a promising future for assemblies of environment councils. After plans for the 1984 assembly had to be cancelled, a meeting of the chairmen of councils was held in Ottawa late in 1984. The chairmen were unanimous in their agreement that the assemblies should be continued and agreed on the basic approach which should be followed in the future. CEAC was pleased to have had the opportunity to host that meeting and we look forward to participating in future annual meetings of councils on a regular basis".

2. Environmental Council of New Brunswick

Mr LaPierre gave a brief summary in French of the Council's activities for 1984. Reproduced below is the text he submitted to the assembly.

"a) Introduction

The Environmental Council of New Brunswick was created in 1971 by an order-in-council of the Lieutenant Governor. Its members are appointed by the Lieutenant-Governor-in-Council. They may not be members of the New Brunswick Legislature or be employed by the Province or the Government of Canada. Members are appointed for a term of three years, or longer, at the pleasure of the Minister of Environment.

The Council's duties are to study and report to the Minister on any matter coming within the Clean Environment Act. Council members

may, on their own initiative, prepare reports and conduct studies on any subject they consider of importance for the protection of the environment in New Brunswick.

The Council may submit a report to the Minister of Environment at any time, although, under the Clean Environment Act, it is only required to submit an annual report on its activities.

b) Summary of Council's activities in 1984

During 1984, Council members studied the following subjects and reported to the Minister of Environment.

1. Policy on land use in New Brunswick
2. Solid waste management
3. Management of ecosystems and coastal marshes
4. Environmental disruption caused by foresting operations
5. Introduction of a twelve-month general hunting licence.

The Council also made the following recommendations to the Minister:

1. That the Department of Environment implement a permanent program for monitoring the quality of groundwater in order to assess the general level of pollution in New Brunswick.

2. That the Department of Environment show initiative with respect to solid waste management in New Brunswick by supporting the construction of an operational recycling centre in Fredericton. This centre could be a regional project to promote the advantages of recycling solid wastes and train personnel in this field for other municipalities throughout the province.

3. Since the people of New Brunswick are becoming increasingly aware of environmental issues, Council members feel that a more effective input mechanism should be developed so that the public and private sectors can play a greater role in the development and implementation of solutions which could affect the quality of life of all New Brunswickers.

In 1985, Council members agreed to take part in a commission of inquiry into hazardous waste controls in New Brunswick. During the fall, the Council will be holding a series of province-wide public hearings to gather the opinions of New Brunswickers on the storage of hazardous wastes and the provincial controls to which they should be subject. The Council will then submit to the Minister of Environment recommendations on the long-term policy that the people of New Brunswick would like to see developed in this regard.

c) Ecological reserves in New Brunswick

The Environmental Council is responsible for the management of ecological reserves in New Brunswick. Seven ecological reserves have been developed, and an official announcement is expected shortly. In view of budget restrictions, field activities in 1984 were quite limited.

Brief assessments providing an overview of each site and outlining the factors of participation, the current situation and the potential for change were conducted on nine possible sites. Development plans were also completed for two other reserves. All the necessary legal documents are to be prepared shortly, and an official announcement is expected in the near future.

The establishment of new reserves is unlikely given the current budget cutbacks of the New Brunswick gouvernment; however, Council members will continue their efforts in this direction for reserves they consider possible in the current budgetary context. We will also attempt to instil in all residents of New Brunswick a unique sense of responsibility in environmental conservation matters.

3. Nova Scotia Environmental Control Council

Mr Haugg expressed his delight in participating once again in the assembly of environment councils. He then called on Mrs McCready to

present the Council's report. The text of her report follows.

"The Nova Scotia Environmental Control Council is a 12 - 15 member advisory board to the Minister. Eleven disciplines are represented, as specified in the Environmental Protection Act. Members are appointed for a two-year term, which can be renewed once. Staff support has been provided by the Department, and is shared with education and public consultation activities.

Since the last National Assembly in 1983, when Council was suffering from vacancies in several key disciplines, new appointments have enabled us to regain full strength. At present, we have established "Issue Groups" to concentrate on the four main areas of Pesticides; Hazardous Wastes; Water Resource Management; and Environmental Assessment/Public Consultation. Council members have expressed keen interest in environmental education, and are supporting departmental activities to re-establish educational programs. In response to this interest, we are beginning special sessions with our membership on the principles/theory of education and public consultation.

The Environmental Awards program has continued on an annual basis, to an excellent reception from the general public and government. Awards are offered in seven categories, and presented at a special Luncheon by the Minister, usually with participation by the Premier. This year, a new category - education - was established to accommodate the numerous nominations we've received in the past for teachers or school administrators who have devised creative education programs.

In February, 1984, Council was requested by the Minister to conduct a Public Hearing on a proposed pit and quarry operation. The site, which has the commercial advantages of high quality accessible aggregate and proximity to Halifax and therefore to major construction sites and transportation routes, is also located on important watershed and close to upscale residential areas. The

developer has also become the focus of resident frustrations with an existing quarry.

The Hearing resulted in a recommendation for approval, with appropriate environmental protection measures, including continuing citizen involvement. The Minister adopted another recommendation, to establish a committee to set regional environmental quality standards, before considering the proposal further. That committee is now operating, and the developer has been allowed to undertake preliminary road clearance.

In addition to the project specific recommendations, the Hearing Board gave a very broad interpretation to its mandate, and developed recommendations on:

1) Project Evaluation Procedures: The lack of a formal and generally recognized Environmental Impact Assessment Process had led to unnecessary delays and frustration, as well as increased cost, to all parties - developer, public, and government. The Board recommended adoption of a process to encompass both screening criteria and opportunity for appropriate public consultation.

2) Pit and Quarry Regulation: Proposed regulations form 1978 had never been enacted, and their validity was questioned by several parties representing both sides of the issue. The Board recommended that the regulations be evaluated and their status clarified.

3. Hearing Procedures: Existing procedures are outmoded, and, as the process becomes more sophisticated, the costs are escalating to the possible exclusion of some interested parties. Council is hopeful that alternative means of public consultation can be adopted.

Council also submitted, in early 1984, a comprehensive series of recommendations on pesticides control in Nova Scotia. These emphasized the need for extensive public education and consultation on resource management strategies, including pesticides use. The major long-term recommendation was for legislation to provide a framework for pesticide decisions and establishment of a pesticides advisory board.

Since June, 1985, Executive Members of Council have been part of a Departmental/Council Task Force on Hazardous Wastes. The Task Force was established by the Minister to co-ordinate and analyse existing information and activities, and to recommend a plan to develop a hazardous waste management strategy. The Report and Recommendations will address the nature and scope of hazardous materials in Nova Scotia; the existing regulatory and administrative regime; national, regional, and provincial intiative; and public consultation. A first draft has been completed, and the Report will be presented formally at an October 31 meeting with the Minister".

4. Manitoba Environmental Council

Mrs Malley gave a brief report on the MEC's recent activities. The written text she submitted to the assembly is reproduced in full below.

"The Manitoba Environmental Council is an advisory body with approximately one hundred members (a sort of mini Manitoba public). Council members are appointed by the minister responsible for the environment, currently the Honorable Gérard Lécuyer, Minister of Environment and Workplace Safety and Health. A maximum of fifty seats are reserved for provincial non-profit organizations, with one representative per agency. The remaining members are private citizens. Members, who volunteer their services, are appointed for a two-year term. The provincial government provides the Council with offices and support services. An operating budget has been provided for this purpose. The Council has two paid employees (1.75 person-years): Mrs Keri Barringer, co-ordinator, and Mrs Darlene Watson, secretary.

In view of the voluntary nature of the Council and its close ties with the provincial government, it is part of the Manitoban network of ENGOs.

The Council has two primary roles: to make recommendations, generally in the form of briefs submitted to the Minister of Environment, and to inform the public on environmental issues and assess its concerns in this regard.

The Council is supervised by a Board of Directors, which includes: the Executive Committee (Chairman, Vice-Chairman, Retiring Chairman, Secretary), chairmen responsible for memberships and publications, chairmen of technical environmental committees (chemicals, water and waste, education, energy, wildlife, environmental assessment, land use) and eight regional chairmen.

Since its last report in June 1983, the Council submitted a number of briefs to the Minister on the following topics:

i) nuclear energy in Canada

ii) subsidies for school bus transportation

iii) the environmental assessment and review process

iv) federal government approval of the Manitoban environmental assessment and review process

v) use of herbicides in forestry

vi) use of insecticides to control equine encephalitis in the West

vii) recycling of aluminum containers

viii) water quality control

ix) sale of Crown land.

The following are some of the issues the Council studied in 1985-86: the effects of the Limestone hydro-electric plant on the environment and the appropriate means of long-term environmental monitoring; the effects on the environment of the proposed deepening of the wells at the Lac-du-Bonnet underground research laboratory in order to pursue research on underground nuclear waste deposits; the long-term effects of herbicides such as "Roundup" on the province's

forests; the proposed establishment of a provincial wildlife park at Atikaki; and the prospecting and extraction of oil and gas in the Hudson Bay area. Two other projects are under way: 1) preparation of a brief on the Manitoba hazardous waste management program, to be submitted during public hearings which the Clean Environment Commission will be holding in October and November; 2) organization of a public forum on forestry in Manitoba. The proposed title is "Forestry in Manitoba: habitat or crop? Can we have it all?"

The Council has been in existence for fourteen years. About three years ago, plans were made to change its administrative structure. It was decided that the MEC would retain close administrative ties with the provincial gouvernment. Relations with the Minister's Office and government officials are very cordial. Having achieved most of our objectives with respect to administrative structures, we must now concentrate on making the Council more effective. In other words, we must exercise greater influence on government and private agencies so that their decisions always ensure environmental protection. In order to intensify its actions, the Council must:

i) increase its exchanges with the minister responsible for the environment and other ministers responsible for items discussed in its briefs (for example, Natural Resources, Education, Agriculture, Municipal Affairs);

ii) improve its contacts with the public in the area of the dissemination of information on the environment and urge the public to become involved in environmental decisions;

iii) encourage many volunteer members to participate more actively in its work".

5. Environment Council of Alberta

Mr Crerar addressed the members without a prepared text. A summary of his report was provided by Mr McConnell.

"Thank you, Mr. Chairman, for the opportunity to speak on behalf of the Environment Council of Alberta.

There's an old saying: it doesn't matter what they are saying about you as long as they spell your name right. That is part of the response I would make to Diane's comments about Manitoba. We have the same problem ourselves in terms of identifying for the press what it is we do and we have tried in many different ways to try to explain ourselves to them. Every time you get a young environmental reporter trained, he is sent off to some higher and better field and you have to start all over again explaining the basics to the next one who comes along.

Before I go on to my presentation, I would like to note something that Tom Beck did not mention. I happened to be a member of the Nielsen Task Force, examining the Department of the Environment, and I can say - I don't think it's confidential - that the Canadian Environmental Advisory Council provided our task group with their view of the nature of the environmental problems in Canada and a forecast of the directions in which these problems were likely to evolve. Their presentation turned out to be one of the most useful pieces of information that we received. Presentations sometimes don't make their full impact on first hearing and this one didn't. However we found ourselves referring back to it constantly, and when we began writing up our report, we started using great chunks out of the C.E.A.C.'s presentation, quoting it with great authority, and relying very heavily on it to justify the directions in which we were taking our recommendations.

Now, to report on what the Environment Council of Alberta has been doing. We are going to be on the program this afternoon talking about the Provincial Conservaiton Stratregy (P.C.S.) and our involvement in it. At that time Archie Landals and Dave Buchwald, the other members of our delegation, will be giving greater detail. I will provide an introduction to the P.C.S. It's something this Assembly can very profitably discuss, because a P.C.S. has the ability to provide a series of bridges between disparate groups - between the developer and the conservationist, between the different provinces, and between the provinces and the national government.

Indeed, its major structure is enclosed within a World Conservation Strategy, providing a bridge to a global strategy.

I think the E.C.A's greatest accomplishment, since we last met, was the completion of the Report and Recommendations of the Public Hearings on the Maintenance and the Expansion of the Agricultural Land Base. We held public hearings in 16 locations in Alberta. We had something like 284 submissions to our Panel from all parts of the province and from all the different interests concerned with agricultural land - the farmers, of course, but also wildlife people and developers. We indentified a major dilemma. I don't think there was anyone appearing before our Panel who didn't want to preserve agricultural land. On the other hand, these same people did not want to have the kind of regulation, administration, bureaucracy, that is associated with the kind of preservation techniques that have been successfully applied so far, in British Columbia and in Quebec. People in Alberta are not ready for that kind of approach. It goes against their philosophical bent. We heard from those who were deeply concerned about the preservation of agricultural land. I particularly remember the presentations from members of the Women's Institutes, the wives of farmers throughout the province. They were very impassioned about the preservation of agricultural land, but when we asked them whether they wanted to have the kind of approach that was working successfully in British Columbia and Quebec, they sort of rocked back on their heels and said: Oh No. This is a common paradox. We want to get rid of hazardous waste, but we don't want it beside us. We want to preserve agricultural land, but we don't want to have the kind of rigid control that has been successful in other locations.

So the Panel had to come up with an alternative solution. And we did. Il would recommend to you that you read our Summary Report and Recommendations. We tried to make it as accurate and as popular as possible. We think we have succeeded better than we have before. The latest word I have was that we had gone through our first printing, and were going into our second.

We are now moving into the next topic - Public Hearings on Recycling. Let me provide a bit of background. We have two major functions in our Environment Council. It reminds me a bit of the Quebec situation, except that the two functions in Quebec are separated, with two different organizations responsible for them. We have one organization responsible for both. The first is the holding of public hearings on matters which have been identified for the Council by an Order-in-Council. As directed by Order-in-Council, the Council is now preparing background documentation for recycling, looking at the extent to which it is being done in Alberta and why more isn't being done; what the barriers are; and how one overcomes these barriers. We are developing a number of background reports. These information reports are impartial, factual documentation on recycling that the public can use in preparing briefs for the hearings. There's a wealth of knowledge out there and public hearings are a way of harvesting ideas and experiences. Why is it, for example, that the Boy Scouts somewhere stopped picking up newspapers, or cartons, or whatever? I'm sure we will find out in our public hearings. Why is it that so many times recycling starts off grandly and then fails? People will suggest to the Panel ways in which their particular situation was stymied, and then will give us some clues as to how to increase recycling. The hope and the intention is that the public will provide the Panel with views, opinions and ideas. That's the way it has been in every public hearing.

This side of our operations is supported by a research staff, and we have panels chosen for each topic, made up of people who are particularly suited for each. For example, on the Agricultural Lands Panel, our Chairman had a background in the ranching industry, one member was a major grain farmer, another a professional agricultural consultant. One panelist headed an engineering firm which worked for urban land developers. By statue I am always Vice-Chairman of any Panel of Council. At first I thought that the Panel would be completely unworkable because we were putting so many incompatible mixtures together. But in fact we had the kind of

representation that enabled us to come up with alternative answers that were required. And for our Recycling Panel I'm sure we will have people who are technically competent in recycling and people who have had actual experience in running volunteer community projects - and so we will get the kind of broad-scale coverage needed.

Now, that's the most formal side of Council - our Public Hearings side. We report to Cabinet with our Report and Recommendations. The other is our Public Advisory Committee, which is made up of 124 reprensentatives from organizations throughout the province. In that sense it's much like the Manitoba Environmental Council. These people are nominated by their respective organizations, which include most of the environmental groups in Alberta, but in addition there are people who represent broad sectors of industry, or interest groups. We have representatives from the Registered Nurse's Association, the Chiropractor's Association, the Trapper's Association, the Manufacturer's Association, etc.

You can't bring 124 people together in a room and have any kind of an appropriate discussion, so they divide into six study groups, covering urban environment problems, energy problems, renewable resources, non-renewable resources, pollution control and so forth. Depending on their interests, each of the representatives studies a particular problem area. Council provides support through a secretariat. The secretariat makes arrangements to get speakers who are consultants or from different departments of governement. If they are concerned about water quality, we bring in a specialist. If they're concerned about energy - windmills for example - we go out searching for a windmill expert, either in the private or the public sector. These study groups are Council's eyes and ears - a continuous reference point to the environmental concerns of the people of Alberta. It's our way of keeping continuously informed. They also enable Council to refer environmental concerns back to people from different walks of life and to get their reaction.

I think that's enough to give you some idea of the structure and activities of the Environment Council. We will be speaking of P.A.C. more this afternoon because our Public Advisory Committee is an integral part of our approach to the development of a Provincial Conservation Strategy. We are going to try to use P.A.C. in a different way in order to develop the Provincial Conservation Strategy. In fact, it is essentially their strategy. We are going to help them with our assistance and advice.

Thank you very much.

In answer to questions following his report, Mr. Crerar explained that the Council reports directly both to the Minister of the Environment and to Cabinet. The Environment Council Act directs the Council to report on its Recommendations from the Public Hearings to the Lieutenant-Governor-in-Council, and to the Minister of the Environment, but not through the Minister to the Lieutenant-Governor-in-Council".

6. Ontario Ministry of Environment

Mr Gallon first expressed his hope that Ontario would have its own council by the next assembly of environment councils; he expects the Ontario council to be created sometime within the next eight months. He then proceeded to discuss some of the environmental achievements of the new government of Ontario since taking office in June 1985. He also outlined the problems Ontario faces in this area.

Mr Gallon spoke without a prepared text. Reproduced below is the text he submitted for publication:

"It is a pleasure to join you today on behalf of Ontario Environment Minister Jim Bradley.

He also asked me to outline some of the new directions we are following in Ontario and to pay close attention to the ideas that you bring forth in your meeting so that we can benefit from your experience.

When the new Government took office in Ontario just over three months ago, it did so with a firm commitment to improve the extent and quality of environmental protection in the Province.

It was apparent that environmental protection was not a major priority for previous Governments and that this had undermined public confidence in the Government's environmental performance.

The challenge that Mr. Bradley faced was twofold:

First, to shake off the cobwebs of inertia, make things happen and establish a new momentum for environmental achievement.

Second, to restore public confidence, by demonstrated accomplishments and through a more open and consultative approach to environmental protection.

One of the Minister's first initiatives was the proclamation of part IX of the Environmental Protection Act and a quick and thorough public review of the implementing regulation. This legislation is designed to improve Government response to spills of hazardous substances and to confirm accountability of carriers and owners for these materials.

While an active industrial lobby has opposed implementing this regulation, the public review has shown that it can, in fact, go into force without servere economic disruption backed by a practical system of insurance.

Hard on the heels of this move was the Minister's decision to eliminate a long-standing exemption and declare the industrial waste

management plans of the Ontario Waste Management Corporation subject to Ontario's Environmental Assessment Act.

This decision was acclaimed both by the Corporation itself and by environmentalists across the Province. It will provide a much better Environmental review process, conducted by an experienced administration, and improve the quality of the final waste treatment system developed.

Wasting no time, the Minister also established a regulatory process for the operation of mobile PCB destruction facilities and Ministry staff are reviewing applications for technologies seeking certification for use.

More recently, the Minister announced a new policy with regard to soft drink containers, an issue which had the previous Government deadlocked for three years. this policy provides an assured place for the money-back refillable bottle.

It also allows room for new types of recyclable containers in the solft drink market and ensures that a substantial portion of these containers will be recycled. Since our major emphasis is on multimaterial recycling, these policies incorporate industrial incentives and Government funding to ensure the recovery of a wide range of recyclable material which goes far beyond the narrow confines of the soft drink market.

Quite apart from the obvious environmental benefits, we expect this program to provide employment both in the soft drink industry and in recycling - A good 1 400 jobs or more over the next three years.

This policy was established after thorough consultation with all of the major declared interests on this issue.

More than that, we are maintaining consultation in implementing the policy. A new recycling advisory Committee, consisting of industry,

In addition to these new initiatives, we have taken a new direction in terms of the Ministry's most basic and essential role - environmental protection.

We have served notice to industry that the deadlines for pollution control set out in Ministry control orders must be met. Extensions are no longer available for the asking.

One major steel producer had that message brought home when an independent auditor rejected the company's claim that it could not afford to meet our cleanup timetable. The control order has not been amended and the company must meet its original deadlines.

We have also made it clear that nobody is above the law when it comes to environmental protection. The law applies to Government as well as to the individual and to industry. We have laid charges against a crown corporation and against a municipality for specific offences.

We believe that Government agencies have a duty to set an example in the way they operate.

We are finding a great deal of support for tough and consistent enforcement of our environmental legislation both from the general public and from the people in industry who must abide by those laws.

The waste management industry, for example, has told the Ontario Government in no uncertain terms that they want their operations policed thoroughly. The professionals who take pride in the standard and quality of their services have no sympathy for fly-by-night pirates who undercut legitimate operators, despoiling not only the environment but also the reputation of the waste management industry.

We also see a growing public interest in stiffer environmental penalties. We are looking at our legislation now with a view to providing these.

There are, however, environmental issues which can not be dealt with under our laws alone. On these, we are seeking allies to deal with these problems on a co-operative basis.

Ontario is very concerned about the hazardous chemicals which seep into the Niagara River daily to threaten our water. We have taken firm steps to control Ontario sources within the next year, cleaning our own house and setting an example.

Mr. Bradley has offered the State of New York our moral support, backed by our technical resources, to assist their efforts to get more federal assistance to deal with the dangerous situation on their side of the border.

Last month, the Minister set out Ontario's position on Great Lakes diversions to Michigan environmental law specialists. We are firmly opposed to such diversions as are all of the Great Lakes States. However, he also used the opportunity to urge those States toward clean power sources and support for our fight against acid rain.

He has also invited the pulp and paper industry to get off the fence and start lobbying other industries and utilities to cut back on sulphur emissions. Acid rain has the potential to destroy our forest industry, by killing the trees on which it depends. Controlling acid rain is as important to our economy and industrial interest as it is to our environment.

The threat posed by acid rain to our forests, lands and waters was documented extensively at the International Conference on Acid Rain in Muskoka last month.

We sponsored this conference in co-operation with the Federal Government and the other Provinces to assemble the latest and best evidence in our case against acid rain. Some 750 leading scientists attended and contributed to this growing mass of evidence.

Their studies reinforce Ontario's commitment to clean up the sources within our boundaries and the major provincial sources are on notice that we expert more from them. A detailed acid rain abatement strategy for Ontario will be announced later this year.

In the past three months, through these and other initiatives, we have set new precedents in environmental protection and established a momentum which the Government intends to maintain.

There is a visible record of achievement which should encourage public confidence in Ontario's environmental programs.

The Minister and the Ministry are also working to increase public confidence by increasing public involvement.

We are making public input an essential ingredient in the development of new regulations and standards for air quality and hazardous wastes.

The Ministry is providing more information on contaminant levels and pollution problems to the general public and to the people affected by specific problems.

When we have to move PCBs from a spill in Kenora, the people affected have a say in where we put them. When our scientists find hazardous chemicals, whether they are in Hamilton Harbor or the St. Clair River, the results of their studies are made public.

Ontario's commitment to open Government is very emphatically observed when it comes to environmental issues.

The Minister is making every effort to build bridges - to open a dialogue with the public and with the various sectors and interests who may be affected in environmental issues.

The objective of this dialogue is to provide better understanding all round on these issues and to enlist all our community resources in dealing whith them.

One forum for dialogue, now under serious consideration, is an Environmental Council. While Ontario's legislation provides for this sort of advisory panel, none has ever been established.

We have a number of advisory groups concentrating on specific areas, but Ontario is now looking seriously at the possibility of a council with a broader mandate.

And we are hoping to benefit from your experience in proceeding with this".

Mr Gallon concluded his address by stating that Ontario would be hosting two important conferences in May/June 1986. With the co-operation of the federal government, a conference will be held to review the World Conservation Strategy under the auspices of the Canadian Nature Federation and the International Union for Conservation of Nature and Natural Resources. The Friends of the Earth will also be holding their third biannual conference, entitled "Faith of the Earth", in the province.

7. Bureau d'audiences publiques sur l'environnement

Mr Beauchamp followed his prepared text fairly closely. Reproduced below is the text he submitted, including a number of points added during delivery.

"When I was Chairman of the Conseil consultatif de l'environnement du Québec, I noted that the tasks assigned to the various provincial environment councils were assumed by two agencies in Québec: the Conseil consultatif de l'environnement and the Bureau d'audiences publiques sur l'environnement (BAPE). I would like to thank Mr Junius for inviting me to give you a brief report of our activities.

The Conseil, through its membership, represents the people of Québec, and is interested primarily in policy and orientation matters, while the Bureau d'audiences publiques sur l'environnement consults the public directly. The BAPE is involved in projects, particularly through the environmental impact assessment and review procedure, with responsibility for information activities and public hearings. The Regulation respecting environmental impact assessment and review states that, for certain specific projects, the proponent must file a notice of his project with the Minister. The Minister then forwards to the proponent, through his department, an impact study directive. When the proponent has completed the study and it is considered satisfactory, the Minister forwards it to the BAPE for a public information period of forty-five days. This period may be extended by the Minister.

During this time, any group, municipality or private citizen may request a public hearing into the project. If the request is not frivolous, the Minister must grant a hearing. When a public hearing is called, the BAPE sets up a commission responsible for the hearing and investigation. This commission consists of some of the Bureau's full-time members or persons appointed specifically for this purpose. These persons are designated by Cabinet, on the recommendation of the Minister of Environment, and usually at the suggestion of the BAPE Chairman. Commissions are given a four-month mandate, during which time two consultation sessions are usually held. The first is used to gather information, while the second, which follows three weeks later, allows the public to submit briefs and opinions on the project. On completion of its work, the commission submits a report to the Minister. This report is made

public directly by the Minister or automatically sixty days after receipt. The case then goes to Cabinet for a final decision on the project.

The Bureau d'audiences publiques sur l'environnement has five full-time commissioners, appointed for a five-year term by Cabinet. The BAPE has a total annual budget $1,203,300 and eighteen permanent positions in the public service.

Activities 1983-1984

In 1983-1984, there were fourteen public information periods that did not result in public hearings. We also received the following four mandates for investigation and hearing:

- A forest insecticide spraying program. The proponent, the Department of Energy and Resources, withdrew its proposal. However, since the hearing had been held, the BAPE submitted a report, in which the commission requested that additional health studies be conducted because of a possible link between transmission lines and public health. The commission also raised the issue of a compensation policy, particularly for farmers who had power lines crossing their property.

- The Québec-United States interconnection project: Des Cantons substation and 735 Kv Nicolet - Des Cantons transmission line and ± 450 Kv Des Cantons - New England transmission line.

- A proposal to develop a marina at Lévis. For technical reasons, this hearing was not held.

- An investigation into the problems relating to the management of Lac Noir, a resort lake in the Montreal region.

Activities 1984-1985

From April 1, 1984 to March 31, 1985, the BAPE had fifteen public information periods that were not followed up by public hearings.

The BAPE received five hearing mandates:

- Filling-in of the Rivière Godefroy flood plain with a view to residential development. This case dealt with specific problems relating to a policy of encroachment on watercourses.

- Draining of the Rivière Chaude by dredging and stripping. The proponent, the Department of Agriculture, Fisheries and Food, decided to withdraw its proposal before the hearing.

- Spruce budworm aerial spray program. This was the second hearing on this program. The Department of Energy and Resources proposed a five-year program for the spraying of forests, primarily with chemicals, as part of a global forty-year strategy. This was a major and highly complex hearing. Cabinet decided to authorize the five-year spray program, but on a limited basis. At the end of the program, the Department of Energy and Resources will be required to cease all spraying with chemical products and switch to Bt.

- Proposed electric power station on the lower North Shore (Lac Robertson). Our report called for additional studies, particularly with respect to justifying future demand for electricity. The Montagnais-Attikamek made representations regarding the territorial problems this proposed station would cause.

- Lac Saint-Jean bank stabilization program. Alcan uses this lake to generate electricity. The commission recommended a water management program for the various uses, including tourism and the resort business in the lake area.

- Another difficult case involving the water treatment program in the City of Longueuil has just been closed. The city wanted to have its pipe pass along the bank of the St Lawrence. However, our commission recommended that it be on solid ground. This was not an easy decision in view of the fact that the Premier at the time had taken a position in favour of the project. However, Cabinet agreed to our main recommendations.

Conclusion

In closing, I would like to mention my special interest in the issue of mediation in environmental matters. We have conducted some research into this area and we wish to study it further. If your

province has had any experience in this regard, I would be delighted to hear from you. We are also interested in two other subjects: the environmental assessment and review process, and reconciling economic development and environmental protection".

8. Conseil consultatif de l'environnement du Québec

Mr Junius followed fairly closely the text he submitted.

"I invited Mr Beauchamp to participate in our assembly as well because the agency he heads is complementary to ours, as I mentioned in my opening address. I would like to add that the BAPE fulfils a role which other councils have received under legislation. In Québec, it is completely separate from and independent of the Council.

The BAPE's mandate stems from the Regulation respecting environmental impact assessment and review. It still receive its mandate from the Minister. It has investigatory but no decision-making powers and holds public hearings on projects subject to this regulation.

The Conseil consultatif de l'environnement, as its name indicates, does not have decision-making powers either. It advises the Minister, at his request or on its own initiative (at the request of its members, private citizens or groups). Its opinions deal with policy and orientation matters. In fulfilling its mandate, the Conseil may hold public consultations; however, it does not have a mandate for investigation. The Conseil consists of a chairman and ten members chosen from the public and appointed by the government. It also has eight permanent positions in the public service. However, its budget is clearly too small to enable it to carry out any major projects or activities. It works with internal resources, but does occasionally hold consultations.

The Conseil is particularly attentive to proposed acts and regulations as well as amendments the government wishes to make to environmental legislation. It is also concerned with exploring comprehensive issues. It tries to increase government awareness of general policies through the opinions it submits to the Minister of Environment, rather than seek short-term results.

Since June 1983, the Conseil has submitted seven opinions to the Minister. Below is a summary of each:

1. Basis for a conservation policy for the Quebec coastline, 2 volumes, 404 pp

   This opinion, prepared at the request of citizen groups and submitted to the Minister of Environment on February 21, 1984, describes the coastline and the delimitation of public property in tidal areas. It outlines the reasons for protecting this habitat and the changes it is undergoing. One section is also devoted to the protection of this habitat and control of its uses. One of the report's recommendations is to pass legislation protecting the coastline.

   This report has had some good results: the Québec Department of Environment and other provincial government departments are conducting studies on this matter.

2. Opinion on the proposed regulation respecting water resources, 19 pp

   This document, which the Conseil submitted to the Minister of Environment on June 18, 1984, on its own initiative, contains six recommendations. The Conseil feels that publication of this proposed regulation would be inadvisable without a comprehensive coastline policy. It considers this step premature and recommends that the Minister withdraw the proposed regulation until a coastline conservation policy has been developed.

3. Supplementary opinion on a forestry development policy in relation to lakes and watercourses in Quebec, 5 pp

   In December 1982, the Conseil submitted to the Minister a 195-page opinion on this subject. The report described the necessary forestry development based on the primary use of the land, and discussed current legislative and administrative mechanisms for its conservation and restoration. In its recommendations, the Conseil outlined the role the Québec government should assign to its various departments in this respect. The Department of Energy and Resources forwarded its comments to the Minister of Environment, who requested the Council's opinion on the matter. In August 1984, we reminded the Minister of the relevance of our first opinion, while at the same time pointing out the convergence between his points of view and those expressed by the Department of Energy and Resources.

4. Opinion on two proposed regulations with a specific view to fighting acid precipitation, 74 pp

   This opinion, requested by the Minister, was submitted to him on September 25, 1984 within the sixty-day deadline given. The report gave an overall assessment of the proposed legislation, pointing out the limited scope of the regulations with respect to the broader issue of an integrated fight against acid precipitation, itself inseparable from any true clean air policy. The report went on to outline possible forms of consultation and co-operation between the public, industry and government. It recommended that the government make a special effort in the areas of research, popularization and information.

5. Opinion on the protection of alluvial land at Lac Saint-Pierre, 40 pp

   This opinion, initiated by the Conseil, was submitted to the Minister on October 24, 1984. The Conseil again urged the Minister of Environment to prepare, as soon as possible, a policy

and legislation governing the coastline. In the meantime, the Conseil requested that the government make a commitment to cease supporting, by any direct or indirect means, other projects likely to alter the natural conditions of Lac Saint-Pierre's alluvial plain. It also requested that the Minister use every means available within his department and his consultative powers with his colleagues to ensure the integrity of the coastline.

6. Opinion on the proposed regulations governing hazardous waste, 47 pp

   In response to a request from the Minister to study this proposed regulation, the Conseil submitted an opinion on January 24, 1985. The goal of this report was to improve the proposed regulations in order to ensure better comprehensive management of hazardous waste produced in Québec. To this end, the report contained comments, accompanied by recommendations, on a number of general and specific aspects of the proposed regulations.

7. Supplementary opinion on the protection of alluvial land at Lac Saint-Pierre, 75 pp

   In this opinion, submitted to the Minister on June 21, 1985, the Conseil once again reported on this matter following consultations with federal and provincial departments and organizations in the area. Since the departments specifically responsible for environmental issues have developed or are about to develop policies, and the departments responsible for economic matters have also implemented reforms regarding riparian habitats, the Conseil felt that the success of these measures hinged on the development of a global conservation policy. It also suggested that the Minister of Environment give this matter high priority until a policy was formulated.

Many of you may recall that a resolution was passed at the Eighth Assembly of Environment Councils, held in Ottawa on June 6 and 7, 1983, recommending that the Science Council of Canada be urged to

make an effort to further integrate the environmental dimension in forest exploitation and explore the avenues of conservation, recovery and recycling of resources. I am pleased to inform you that the Conseil consultatif de l'environnement du Québec ratified this resolution at its first meeting following that assembly. In a letter dated September 20, 1983, Mr Guertin, our Vice-Chairman, informed Dr Stuart Smith, Chairman of the Science Council of Canada, of the Council's decision.

On April 28, 1984, our Council celebrated its tenth anniversary with a conference on the present and future situation of the Québec environment. This gathering, attended by more than 150, was held at the Montreal Botanical Gardens. The Conseil has published a document containing the texts of all the guest speakers, panelits' responses to them, and the verbatim of the two plenary sessions.

Professor Pierre Dansereau, whom you all know, was our keynote speaker.

The Conseil is currently preparing opinions on the following subjects:

- Quebec policy on industrial waste;
- The future of the environment in Québec;
- Right to a clean environment;
- Industrial fluoride emissions in the Québec environment.

This list would not be complete if I did not mention a new study under way connected with the above-mentioned issue of the future of the environment in Québec.

This study concerns a document published by the Department of Environment, entitled "Valoriser le futur". This report examines environmental research and development. It was prepared primarily by people in industry and private enterprise, and academics. I felt that you would be interested in the Conseil's decision to study this

report and submit its opinion on environmental R&D to the Minister, since this is clearly an important step in the development of the concept of environment, and more specifically the potential or conceivable effects on the thrust of environmental policies.

This document, to some extent, forces the government to examine, review and reassess its position on environmental issues, as well as its and our views of industry's role in the fight against pollution, the lack of attention given to ecosystems, and the increasing participation of all those linked by the goal of improving our environment.

3. "THE ST LAWRENCE RIVER AND THE ENVIRONMENT"

"THE ST LAWRENCE RIVER AND THE ENVIRONMENT"

Paper by Mr Jean Gagné, in collaboration with Mr Léonce Naud.

Mr Gagné, adviser to the Secrétariat à la mise en valeur du Saint-Laurent [St Lawrence River enhancement secretariat], closely followed the text which he had prepared in collaboration with Mr Naud. We have reproduced that text almost entirely, except for a few sentences and paragraphs which the author omitted in his talk.

"A perfect example

From the garden of Eden there flowed four great rivers, one of which might have been the St Lawrence, or so my father taught me! He was forever praising the majesty of the great River, the traditional occupations and privileges of those who dwelt along it, its flora and fauna, the picturesque and wild landscapes and the skill of our sailors.

The talk today has become more laconic and ambiguous, or so it seems to me, and for good reason. The bustling daily life of the industrial cities, except for specialists in the maritime trade, ignores or is unaware of the St Lawrence; people no longer swim in it, while the idyllic steamers ply only the waters of memory and pictures; now and then you hear a complaint that the river cannot be seen or access to it is impossible; the newspapers expose the evils of pollution; the shipyards vegetate and the museums grope about for an identity; our maritime heritage is decayed or dormant; now and then, governments offer good intentions; public opinion is barely aroused; marine ministres are a thing of the distant past. Only a few dare to raise their voices.

A close look, however, reveals that the 1970s marked a turning point. Pressure groups have increased: the Fédération des associations pour

la protection de l'environnement des lacs (FAPEL) [federation of associations for the protection of lake environments], the Société pour la pollution (SVP) [society to conquer pollution], the Association des biologistes du Québec (ABQ) [association of biologists of Québec], the Association québécoise des techniques de l'eau (AQTE) [Québec association of water technology] and so on - they are too numerous to count. There has been more and more public action on the environment of the St Lawrence River. In 1973, the federal and Québec governments signed an agreement to prepare a biophysical inventory of the river and develop an action plan to correct the damage being done to it.

More recently, in a most significant step, the Québec government adopted the St Lawrence project report entitled "Le Saint-Laurent, ressource nationale prioritaire" [the St Lawrence River, a priority Québec resource] and quickly set up the Secrétariat à la mise en valeur du Saint-Laurent and the Agence de mise en valeur du Saint-Laurent [St Lawrence River enhancement secretariat and St Lawrence River enhancement agency]. This is certainly a major change in direction.

Viewpoints have changed and continue to change visibly. The St Lawrence valley is recapturing its status in people's minds as a populated area of Québec that is also a special resource to be protected and managed in a rational way for the sake of the cultural, social and economic welfare - the health, even - of Québec society. At the centre of this change, the awareness of the impaired condition of the St Lawrence environment and the impression of losing major benefits have undoubtedly played a vital role.

Moreover, a discussion of the St Lawrence River and its environment at this time amounts to an examination of a perfect example of the evolution of environmental policies. Furthermore, from many standpoints, the St Lawrence situation is nothing less than an embodiment of the entire Québec situation.

On the subject of pollution, the St Lawrence - a sad case, indeed - incorporates to a significant degree several of the main forms of environmental deterioration: toxic and bacteriological pollution, eutrophication, threats to habitats, to fauna and to flora, encroachment and loss of use, all examples of damage done or about to be done if effective corrective measures are not applied to stop the decline.
(...)

Our health, economy, culture recreation, tourism, agriculture, food, fisheries and jobs are all reasons for our taking a keen interest in the St Lawrence River and in its condition and development. Eighty per cent of Québec's inhabitants live in the St Lawrence basin; nearly 40 % take their drinking water from it; the main animal species live or spend some time in the Laurentian basin; the St Lawrence is an ideal region for hunters and sport fishermen, as well as tourists and vacationers; 70 % of government measures in the cultural field involve Laurentian heritage; and 34 % of Canada's maritime trade moves up and down this river. We could go on listing the many aspects which show the importance of the St Lawrence River in the lives of Quebeckers. However, this is not my primary goal, of course.
(...)

The facts

Although the Laurentian environment is a subject of current interest among government priorities (Longueuil, the Archipelago, the Beauport flats and so forth), much remains to be done before we have a completely satisfactory overall view. As things are at the moment, we must make do with a disparate collection of studies scattered among private firms, government services, universities and associations. Most of these have been done for the purpose of clarifying the particular subject of a controversy or planning some action in a given section of a waterway. In spite of this, we can already form an idea of the overall problem and of the interdependence of the elements

involved. I must insist that this procedure seems to me to be a necessary prerequisite for effective enhancement measures. Effective environmental action requires an interdisciplinary approach and co-ordination; the former is the best foundation on which to base the latter.

Quantities and flow rates

A river is, first and foremost, a mass of water in constant movement from one place to another. It has no respect for administrative lines, land divisions or political boundaries. Flowing water even resists appropriation and expropriation quite well. Still, imagine for a moment what would happen if this water were to be frozen solid forever: it would be surveyed and recorded in no time at all - you can count on it! In other words, as Monsieur de La Palisse would say, "no water, no river".

Nevertheless, water rights on rivers are very tenuous. The water can be diverted from its natural setting, or its course and cycles can be altered. If the atmospheric temperature varies, the quantity and flow rate will also vary. The existence of dams here and there, even on a tributary, can cause appreciable changes along the entire main course, both upstream and downstream.

The St Lawrence River is the outlet from the largest freshwater lakes in the world, with an annual outflow of 6,860 m^3/s from Lake Ontario. In Québec, it is increased by the flow from large tributaries, including the Ottawa, Richelieu, Saint-Maurice and Saguenay rivers. The flow increases to about 10,000 m^3/s under the Québec Bridge. Even during low water (the lowest level of the river), there is no less than about 5,000 m^3/s coming from Lake Ontario; this is the minimum required for the major uses, particularly navigation and waste water dilution. In the Seaway, and between Montréal and Québec City, mere centimetres of draft are important, since they often mean additional tonnes of dead weight, with corresponding economies in topping off loads and

transshipments. The relevance to water dilution is obvious, for about 2,400,000 people take their drinking water from the river, although most of the cities along the river, including the Montréal Urban Community, still dump their sewage into it.

The relatively constant nature of the river's flow is evidence of the size of the reservoirs upstream, and depends on the facilities regulating the Lake Ontario outlet. The International St Lawrence River Board of Control (four Americans and four Canadians, including one Quebecker) is responsible for regulating the outflow from Lake Ontario; in this function, it applies directives from the International Joint Commission.

Three phenomena related to flow rate concern the governments of Ontario and Québec:

1) the growing consumption of water by those along the shores of the Great Lakes;

2) projects to divert water from the Great Lakes to basins other than that of the St Lawrence;

3) climate changes likely to affect the St Lawrence flow rate.

As requirements around the Great Lakes increase, there is more pressure to use the water we have at hand. Why let water be "lost" down the St Lawrence and out to sea? Consumption was 140 m^3/s in 1975, and is expected by the International Joint Commission to increase to 720 m^3/s by the year 2035, which could mean a reduction due to this cause of about 9 % in the average flow of the St Lawrence where it enters Québec. Eighty per cent of consumption in 2035 will benefit Americans.

The four diversion projects already in existence together have a slight upward effect on the Great Lakes level. The diversions to be concerned about are not these, therefore, but the ones contemplated for the future.

In fact, it is increasingly foreseeable that a "water crisis" around 1990-2000 will rival the oil crisis of the 1970s in magnitude. Americans already make a distinction between the Water Belt and the Dry Belt, referring to the water-rich areas and the desert regions. It is clear that the southern states will soon have their economic development compromised by the water shortage and will be increasingly inclined to plead the cost-effectiveness of water diversion projects, despite predictable consequences for navigation, energy production and tourism. For Québec, any further diversion of substantial proportions away from the Great Lakes basin would likely have the direct effect of reducing the average flow of the St Lawrence River, in addition to other major effects that are easy to imagine.

On February 11, 1985, therefore, Québec signed the Great Lakes Charter with Ontario and the eight American states bordering on the Great Lakes. The partners agreed to a sort of joint regional supervision over any new diversion or any project that might involve a substantial increase in water consumption in the areas concerned.

Finally, with regard to variations in climatic conditions, we should consider the prediction of a gradual atmospheric warming caused by the "greenhouse effect". The following is a quote from a talk given in Toronto last year by James P Bruce of Environment Canada:

> In the Great Lakes basin, the main effects will most likely be increased evaporation losses from the lakes themselves, and decreased runoff from the land drainage parts of the basin. These two factors have been estimated in several recent papers by staff of Environment Canada and the U.S. National Oceanographic and Atmospheric Administration. The results indicate a probable decrease in outflow of 21 % of present average values. This is based on a climate scenario involving a 3°C average increase in the monthly mean temperature in the basin, and a small increase, up to 6½ %, in precipitation in the basins of the lakes. A decreased flow of this magnitude, 21 %, would have significant effects on water depths for shipping, on the shoreline of the lakes and, perhaps most

seriously, a loss of hydro power production at Niagara and in Ontario, New York and Quebec on the St. Lawrence, worth three quarters of a billion dollars per year, in 1984 dollars. Water quality could also be adversely affected, with higher concentrations of contaminants in lower level and flow conditions[1].

Let us hope that this will be enough to make us consider getting seriously interested in the problem.

Briefly, any permanent reduction in the mean flow would have substantial negative repercussions, both economically, of course, (hydro-electric production reduced and navigation, trade and recreation severely affected by the lack of water at wharves and marinas, as well as increased dredging and filtration costs) and environmentally (higher pollution caused by dredging, reduction in the diluting capacity of the water, drying up of shoreline wetlands and reduction of fauna habitats and spawning grounds, to mention only a few).

We thus conclude that control or, more precisely, maintenance of the mean flow of the St Lawrence River is advantageous both for protection of the environment and marine resources and for a wide variety of uses, ranging from recreation and tourism to trade and hydro power production.

Damage to the water and the environment would not result in this case from the direct action of pollution or deterioration. This is often the case. Indeed, the reason that environmental protection is such a delicate subject to act upon is perhaps that pollution and deterioration frequently occur when people's intentions are the best in the world. We will see this aspect again when we look at the quality of water and the problems which affect it.

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[1]BRUCE, James P, "The Climate Connection", presented at the Ontario Water Resources Conference: Futures in Water, Toronto, Ontario, June 12-14, 1984.

Quality

In its 1978 report, the federal-provincial committee responsible for studying ther St Lawrence River grouped the main aspects of river water deterioration under six headings, in order of decreasing importance:

1) spread of toxic substances;
2) bacteriological contamination;
3) encroachment upon areas of biological resources;
4) destruction of aesthetic values;
5) abundance of sediments in suspension;
6) excessive enrichment in nutrients (eutrophication).

The order of importance was established in terms of the following priorities: health protection, protection of unique biological resources whose disappearance would be irreversible and, finally, improvement or restoration, as the case may be, of the general quality of the river, with the ultimate aim of restoring full use.
(...)

The seriousness of each type of deterioration is aggravated by the water flow characteristics. In fact, most additions to the river occur close to the banks and take a long time to mix with the river water. The shoreline suffers especially severe damage; the result is a restriction on uses that depend on water quality, such as water supply, swimming, conservation of biological resources, the resort industry and residential development.

Clearly, the worst threat is from toxic chemicals, because of the nature of these products and the scale of the phenomenon, a scale that is increased somewhat by the fact that these toxic products persist and accumulate, and also because they affect both the water and the food chain of marine products.

Numerous surveys have been done (on DDT, dioxins, PCBs, mercury, chlorobenzene, organochlorine compounds, pesticides of all kinds and so on) and an effort has been made to locate the sources of pollution, especially industrial ones. While this has made possible the start of corrective action at the source of chemical pollution, it has not facilitated the task of correcting major damage already done to the environment. Indeed, persistent toxic chemicals disseminate to such an extent that they are unrecoverable, or almost so. Moreover, filtering them out presents serious problems of method and cost. It has even been necessary to monitor communities that consume food products laden with toxic elements and, in many cases, to prohibit the taking of affected animals. Again, we see that pollution involves a whole series of expensive, unpleasant corrective actions. This is the typical situation and should convince us once and for all that the price of negligence will henceforth be so high that the cost of prevention will clearly be lower in all aspects.

South of the Iles de la Paix (near Montréal), one sedimentation zone alone contains 30 metric tonnes of mercury. In the Tracy region, it has been estimated that industries discard about 600 kg of chromium per day.

It seems that the addition of toxic organic substances from the Great Lakes and the international section of the river is quite substantial. In other words, the river and the Great Lakes are interdependent as far as pollution by toxic chemicals is concerned.

Bacteriological contamination is reaching substantial proportions in the vicinity of Montréal and Québec City, as well as downstream from the mouth of certain St Lawrence River tributaries. In several regions, tributaries have been heavily contaminated by the waste water from inland municipalities or by agricultural waste.

In the Québec City region, for example, two enormous pipes going down into the river - known politely as "diffusers" - carry almost all of the waste water from the region. Half a million people add their

contributions to the roughly 600 million litres of waste water dumped into the St Lawrence River each day. Because of tidal action, despite the currents, the waste material disperses over the entire width of the river. Studies indisputably show the difference in water contamination downstream and upstream. Two sewage treatment plants are planned but will not be in operation before 1990. Until then, drastic action is contemplated to prohibit certain aquatic sports in the contaminated water along the Beauport shore, for it is a threat to public health.

Even today, almost all drains in the Montréal Urban Community empty directly into the river. In this case, however, the treatment plant will be in operation earlier, in 1987.

Encroachment upon flora and fauna habitats occurs on a broad scale in the urbanized regions. In the sector of the Rivière des Prairies, Lac Saint-Louis and the river corridor south of Montréal, there is no longer any natural riverbank visible. Since 1945, encroachment at Longueuil has exceeded 300 m in some places. Many reasons are given for this: highway construction, piping, extension of land parcels and any number of others. It would not be surprising to find encroachment justified, paradox of paradoxes, as being in the interest of fighting pollution or protecting the environment!

Such encroachment usually results in losses: spawning grounds, nesting and rearing areas, feeding grounds and wetlands that are now rare. Recent examples show that such practices have not been discontinued and that, in the absence of legislation specifically designed to protect shorelines, we must depend more than ever on public vigilance.

However, it will soon be almost two years since the Conseil consultatif de l'environnement submitted to the minister responsible recommendations for implementation of legislation to protect the shoreline; more recently, the Conseil made a new attempt in this direction with its advice concerning the alluvial land of Lac Saint-Pierre.

The destruction of aesthetic values in the environment immediately brings to mind the visual pollution caused by high-rise buildings, wires, smokestacks and grotesque buildings, or pollution of areas by inappropriate noise. To all this must be added the reduction or loss of water transparency, the cluttering of riverbanks by all kinds of debris, the accumulation of garbage used as fill on the banks and the excessive proliferation of aquatic plants.

These forms of deterioration can be persistent and can result in irreversible actions which sacrifice resources whose value is proportional to their rarity. Although these sometimes subtle forms of pollution and the sites they affect are hardly ever recorded in a systematic way, we should be concerned about them. Such pollution destroys the whole natural aspect of some environments. In many cases, before the natural character of the river and its banks disappears, historical or cultural remnants are also lost. These losses are difficult to assess in dollar terms and are often irrevocable. In these matters, we are justified in talking about the need to adopt new living habits and to plan systematic protection of sites that are rare or important from various points of view.

The abundance of sediments in suspension is apparent beyond Montréal in particular; the gradient of the St Lawrence River is surprisingly low from here to its mouth. The point of greatest sediment suspension occurs in the river estuary where fresh water and salt water meet. The main cause of this abundance of suspended sediment is the erosion of basins being used for agricultural purposes. Thus the hydrodynamic properties of the river downstream from Lac Saint-Pierre help to keep the sediments from the tributaries in suspension and to prevent the formation of large areas of sedimentation. As a consequence, this is the most turbid section in the river portion of the St Lawrence.

The important factor in this is the sediment from the tributaries. It comes from a great many widely scattered agricultural sources. In a number of cases, however, row cropping methods favour clearly excessive rate of erosion. For potatoes and corn, erosion rates between 6 and

13 tonnes per hectare per year have been measured. This is a good place to point out that soil left without plant cover can lose more than 30 tonnes per hectare annually to erosion.

In any case, the sediment from farmland is added to the river at an ever greater rate because most of the watercourses in the St Lawrence plain have now been "improved", as they say, and land drainage has been strongly encouraged. By facilitating the removal of rain water, we have speeded up its movement toward the watercourses and, along them, to the St Lawrence River. In the last 30 years, bulldozers have covered a distance equal to the circumference of the earth at the equator (43,000 km) along the beds of unnavigable watercourses in Québec! Strange craft, with the mission of helping farmers and, without their knowledge, polluting the river! But I was about to forget that some 150,000 km of underground drains have also added their contribution since 1976. Under these conditions, it is not surprising that the flow of solid material in the St Lawrence River at Québec City is reckoned at around 20 million tonnes per year.

Some agronomic repercussions of such erosion should be mentioned: at 20 tonnes per hectare per year, the first 15 cm of soil making up the fertile layer could be carried away in 70 years, although several thousand years were required to create that layer. You might say that the environmental protection of the St Lawrence and the conservation of fertile soils could constitute an excellent common cause and provide enormous benefits!

For the most part, enrichment of water by nutrients, called eutrophication, is considered a form of deterioration only when it occurs rapidly or speeds up. This happens because of municipal discharge loaded with suspended organic material or inorganic substances like phosphorus and nitrogen. The reduction of currents and rapid sedimentation of nutrients create areas that favour the proliferation of water plants and algae. The plants increase rapidly in size and detract from many uses, increasing the cost of water

treatment; moreover, they can destroy or drive out animal species and spoil appearances in places.

There was quick agreement to minimize the phosphorus content of detergents, but this was a timid effort, one that does not repair the damage already done and, for instance, still leaves us with our legacy of Lake Erie water polluted by the municipalities and industries along the shorelines.

Finally, I cannot fail to mention acid rain, which to some degree should be dealt with separately. We are more familiar with its effects and causes and are well aware that the St Lawrence River is seriously influenced by it. Nevertheless, this phenomenon concerns many aquatic and terrestrial ecosystems and it would not be very appropriate to discuss acid rain only as it relates to the river. Moreover, as we know, this is an international problem for which it is especially difficult to set up a program of action.

Uses

For users - the public - the deterioration of the St Lawrence River environment is not counted in tonnes per hectare or measured in some sort of percentage. It has other aspects and other names. These are the uses that have been restricted or lost, activities wished for, controls, limitations and costs. Whether we are concerned with drinking water, hunting, fishing, silting, recreation, resorts, taxes or lost jobs, these are all aspects of the deterioration of the St Lawrence River and of uses we would like to promote. These matters gradually capture the attention and add to public pressure on governments to "do something" before the situation becomes irreversible.

The Québec government has become active in many respects. Let us look briefly at what has been undertaken so far and at the task which remains today.

POLICIES

Quantities and flow rates

The importance of questions related to flow in the river is indisputable. We might expect the government to become more involved in this issue, assess the economic impact of a possible reduction in mean flow, increase its follow-up of contacts with the International Joint Commission and be concerned with defending Quebec's interests before all competent agencies. We have only just begun to take action in this endeavour.

Water quality

In water quality, the environmental departments of Quebec and Canada are involved and are co-operating. Their primary objective is a common one and is of a rather imperative nature: to eliminate as much as humanly possible the addition of industrial, municipal and agricultural pollutants.

For Quebec, the quality of the river water will ultimately be determined by progress in the three aspects of the water improvement program (municipal, industrial and agricultural), at least as far as pollution of Quebec origin is concerned. The main elements of the program are currently the construction and starting up of sewage treatment plants for the MUC (Montreal Urban Community), the QUC (Quebec Urban Community) and the municipalities; the modernization of industrial sectors, following the example of pulp and paper; improved management of agricultural lands (zoning, soil conservation and effluent control); and the reforestation of shorelines and preservation of the water retention capacity of forest soils.

Large cities

For the urban population centres of Montréal, Trois-Rivières and Québec City, the emphasis so far has been on the construction or renovation of gathering systems, which must normally precede the construction of sewage treatment plants. Since the latter are not yet operational, the sewers continue to empty directly into the river.

Municipalities

There are 598 municipalities enrolled in the program; their commitments total four billion dollars, or 82 % of total investment planned for urban clean-up. The amount invested so far is more than 1.5 billion dollars. The government is seeking ways to speed up the process.

Industries

As far as industries are concerned, 6,567 factories have been listed to date. Of this number, 1,444 have been found to be heavy polluters and, of these, 369 have either started work or entered into negotiations to fix a timetable for reducing the pollution level. Regulatory efforts have mostly focussed on oil refineries, chlorine and caustic soda plants and pulp and paper mills.

Of the 4.7 billion dollars earmarked for agreements with the municipalities, 1.6 billion is a contribution to the clean-up of industries forming part of municipal systems. This means that 33 % of industrial waste water will be treated in the municipal sewage treatment plants.

If we add to this the amounts planned for treating industrial water outside the system, totalling 1.8 billion dollars, then 3.4 billion dollars will actually be assigned to industrial clean-up in the final

analysis. To date, 65 % of this amount, or 2.2 billion dollars, has already been committed, while 29 %, or one billion dollars, has been spent.

Since the imminent improvement in water quality will make many uses possible again, the government has decided to complement the water clean-up program with a program that will restore to the riverbanks their true nature and make them accessible to everyone. The "Berges neuves" [new shores] program, to last three years, will provide for the clean-up and development of the riverbanks, through stabilization and planting projects, to improve their quality. This program will also make it possible to tight the spreading pollution, and will help in the restoration of recreational uses for the river. Moreover, the **Act to amend various legislation favouring the development of water sites** (C-6), passed last March, enables municipalities to act as prime contractors in the proposed program.

For its part, the federal Department of the Environment has prepared an action plan that is quite structured; it should allow co-ordination among the federal departments and provide a basis for discussions with Québec. The intention is to make a direct and significant contribution to the restoration of the river[1].

Moreover, the Canadian Environmental Advisory Council has elected to take a special interest in the environmental quality of the St Lawrence River.

The presence in the St Lawrence of toxic substances, and no longer just coliform bacteria and suspended matter, will require an approach which takes into account the fact that these substances come partly from the Great Lakes and that the pollution sources are within a number of different jurisdictions. The interprovincial and international nature of this pollution of the St Lawrence River by poisons could eventually be tackled by an approach similar to that of the Canada-Ontario

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[1]Environment Canada, Québec (1983), regional strategy plan.

Agreement on Great Lakes Water Quality, which allows the federal government to assist Ontario financially in meeting international obligations concerning water clean-up.

Conservation and development of the shoreline

Québec has a shoreline exceeding 9,000 km in length, which gives it the longest seaboard of any province in Canada. Nearly half of its coastline, or 4,183 km, extends along the St Lawrence River and Gulf. Inspired by numerous American states, France and Ontario, Québec is preparing a policy for the conservation and enhancement of the shoreline and islands. Following the example of the American coastal states, which apply the Coastal Zone Management Act, and of France, which has the Conservatoire de l'espace littoral et des rivages lacustres [agency for the conservation of the coastline and lakeshores], the desire here is in fact to benefit from an official document stipulating the Québec government's orientation regarding the water, shorelines and islands of the St Lawrence River. In this way, a general zoning could be mapped out, showing the areas to be kept as natural zones, harbour zones, urban zones and protected zones.

As I mentioned earlier, the Conseil consultatif de l'environnement du Québec more than a year ago produced three excellent basic documents on a conservation policy for Québec's shoreline. It was suggested that there should be a decision-making agency with a mandate of limited duration:

> (Translation)
> "This agency could physically define the shoreline of Québec, determine the location of the public property line and zone the shoreline in co-operation with the RCMs in order to effectively identify sensitive and vital environments, such as marshlands".

Where flats and marshlands are concerned, the Québec government had better act quickly, failing which the federal government has already indicated its intention of taking over these lands.

To protect both its areas of jurisdiction and its environment, Québec would do well to assign the resources and authority required to establish and implement a vigorous shoreline policy. Even the American states, which usually rebel at any attempt to control land use, make an exception for coastal zones.

Habitats

Certain river zones which form particularly favourable habitats for wildlife, such as rapids, marshlands, banks and flats, are also the most likely environments to suffer encroachment for various purposes: highway construction, port development, extension of private land and channelling of the river. The greatest losses are found in the section of the St Lawrence between Cornwall and Grondines.

We now know that, if there is to be fauna and flora conservation, and protection of the natural environment in general, there must first be habitat conservation. At the federal level, Fisheries and Oceans Canada is giving the highest priority to saving habitats, as is the federal Department of the Environment. In Québec, the Department of Recreation, Fish and Game is responsible for cataloguing sites with interesting potential for waterfowl, fish and amphibians and for ensuring their protection and enhancement.

Moreover, it would be advantageous to involve the problem of habitats in the larger context of the World Conservation Strategy (WCS), prepared and publicized a number of years ago by the International Union for Conservation of Nature and Natural Resources (IUCN). With regard to the environment of the St Lawrence River, a consensus could be reached on the basis of the three main objectives of the World Conservation Strategy:

1. to maintain essential ecological processes and life support systems;
2. to preserve genetic diversity;
3. to ensure the sustainable utilization of species and ecosystem.

You will agree, however, that a policy cannot be limited to the statement of a strategy. Like any general strategy, it requires an implementation plan.

Recreation and tourism

Wildlife reserves, ecological centres and cultural heritage developments are by themselves attractions for outdoor enthusiasts and tourists. However, visitors also want access to green spaces along the river, where they can relax and put a boat in the water or camp.

In all such cases, the facilities are very important. Basically, it is a question of investment in the health, culture and economy of Québec, as well as investment in the tourist industry.

With highway tourism fed by a population pool numbering in the tens of millions, probably owning close to a million pleasure craft, the enhancement of the recreational and outdoor potential of the St Lawrence is very important and should be accelerated.

Cultural heritage

Much work has been done so far in cataloguing and mapping natural and historic sites in the St Lawrence corridor. The most urgent tasks seem to be not only to protect by classification and recognition, but also to develop and enhance.

This must be looked at closely wherever there are urban, industrial, harbour and highway development projects. We must avoid obliterating forever those sites and monuments that are significant for our history or culture. Archeological digs, in particular, contribute to the discovery of documents and objects of great value for our cultural history. The Commission des biens culturels [cultural property board] is rather pessimistic: our maritime heritage is rapidly deteriorating and renewed action is urgent. Efforts must therefore be intensified in order to develop numerous sites and objects discovered or preserved along the Laurentian corridor.

The Department of Cultural Affairs has undertaken a systematic inventory of cultural property and is aware of the cultural focus of the St Lawrence. However, there is still no special program for the enhancement of our maritime heritage or of the maritime nature of Québec's culture. Activity in this field is sporadic. We believe it is essential that the maritime heritage conservation and enhancement movement be accelerated. An overall would be extremely useful, needless to say. It is slow in coming.

CONCLUSION

There would seem to be no lack of reasons for unqualified government action on the St Lawrence River: our land, boundaries, agreements with partner governments, natural resources and their conservation and use, economic equilibrium, health, general cultural considerations, transportation, ecology and Québec's reputation.

On many points, the Québec government and public services have been at work for a long time. However, for lack of an overall, integrated policy centred on the St Lawrence River and its resources, the primary reason for government action becomes blurred and the lack of concerted action is felt.

It recently became apparent that the Québec government had truly acquired the will to promote an integrated policy for the enhancement of the St Lawrence River resources. Following several departmental statements and publication of the St Lawrence project report entitled "Le Saint-Laurent, ressources nationale prioritaire" [the St Lawrence River, a priority Quebec resource], the government decided to establish the St Lawrence enhancement secretariat, as I have already pointed out. The terms of reference of the new agency include:

- arranging for or conducting studies and analyses to develop expertise enabling the government to promote Québec's interests;
- ensuring that the information will be distributed and, specifically, that each department will be informed of the latest developments concerning it in relation to the St Lawrence River;
- advising the government and its departments and agencies on any project or subject concerning the enhancement of the St Lawrence River;
- ensuring Québec representation before Canadian and American agencies whose activity could affect development of the St Lawrence River, in co-operation with the government departments and agencies concerned.

There is no question, obviously, of duplicating or substituting for the other agencies involved; the object is to co-ordinate their efforts.

These are good signs, for reflection shows that the enhancement of maritime activities and all other activities related to the river provide the strongest reasons for halting the deterioration. Enhancement cannot be satisfied with stopping a destructive process. Its goal is to derive benefits from a resource that is protected and sensibly managed. This is an irresistible prospect, however little we may have renewed our acquaintance with the somewhat forgotten marvels of the St Lawrence River.

It seems to us that the best environmental policy is one of enhancement for the good of the residents and of those who will follow. In any case, this is the approach recently adopted by the Québec government.

In this regard, I must emphasize the original and indispensable role of the environmental council. Indeed, this agency is competent not only to facilitate dialogue, but first and foremost to interpret, in political terms, knowledge and opinions from all sources.

If the St Lawrence environment is indeed an excellent example, as it seemed at the beginning, I think this is primarily because we think we have finally adopted a point of view that sees the obligation to act as being directly related to the need, demonstrated by so many activities, for an asset. We are counting on the centuries-old experience of the St Lawrence River to awaken interest in the protection of its environment and to attract the concerted effort that will be required".

Q. (Mr LaPierre) How do you explain that pollution will not be completely stopped on the south shore of the St Lawrence, downstream from Québec City?

A. (Mr Gagné) In the short term, the gathering system and treatment system will not be adequate for the requirements, even though the work being undertaken at the moment is on an enormous scale.

Q. (Mrs Malley) I understand that the Grand Canal Proposal is still alive; what implications would that have for the St. Lawrence?

A. Mr. Gagné said that he knew of no definite study about the so-called Kieran's Project to divert the waters of James Bay. It was still in the discussion period.

A. Concerning that proposal, Mr. Nault said that the balance of the Great Lakes is not what Mr. Kierans had thought. Studies on the water levels and balance of the Great Lakes were multiplying rapidly. From what is

now known, very few man-made diversions would have any impact on the water levels. The climate and the change of seasons produce an effect of one or two inches. Mr. Kierans could not have know that before. Though current, it is an old proposal.

Q. (Mr Brosseau) The Québec government has identified the St Lawrence as a priority resource, while several groups would have liked it to identify it as a priority natural resource. We can already see the nature of the conflicts which will always confront us with a developed drainage basin. The World Conservation Strategy is also involved. It seems to me that the problem between conservation and development is a matter of degree; at the moment, there is no proposal to assess this degree. It appears to me that certain types of development and certain conservation desires will have to be restricted. What are these and how will it be done? You seem to be saying that conservation will ensure development, but I don't think that is the answer.

A. (Mr Gagné) To my mind, there is no opposition between natural resource and Québec* resource. We are looking at all resources, whether developed or not; we have added the word "Québec"* to point out the responsibility of the community and of those who represent it. I have been careful not to systematically use the word "development", since I do not believe that the proper perspective is one of ensuring development to satisfy conservation or vice versa. It seems to me that the concept of enhancement, involving the sharing of the benefits of a community property, is the best justification for seemingly expensive measures to correct deterioration.** I do not recommend systematic

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* The French is "national". - Tr

** The French reads "actions... de corrections et de détérioration" (literally, "correction and deterioration measures"). - Tr

development; on the contrary, I see contradictory developments which can only be resolved to the extent that conservation is heeded.

Q. Dr Conover replied that it is quite correct to recognize that the problems of pollution in the St. Lawrence start with the Great Lakes. There are also diversions and other problems. On the other and, it is important to realize that while the main problems are undoubtedly in the main trunks of the river, there are downstream effects for not only Quebec, but New Brunswick, Nova Scotia and the Scotian Shelf.

One of these is the question of water diversion. Studies suggest that there is close correlation between fish recruitment success and the amount of spring run-off from the St. Lawrence, which affects not only the Gulf of St. Lawrence, but also the major Atlantic fisheries.

The other effect is that the hydro-dynamics of the Gulf are such that polluted water along the southshore turns around the end of the Gaspé, goes down the east shore of New Brunswick, onto the Magdallen Islands and through the Northumberland Strait to Prince Edward Island and Nova Scotia. Though it gets directed en route, it is definitely a downstream concern. It is important to remember that there are four Atlantic provinces, as well as others Quebecers, downstream.

A. (Mr. Gagné) I cannot but be in full agreement with what you said.

Q. Mr. Crerar said he understood that the nutrient balance in the Gulf was reasonably good, because the loss of nutrients from the damming of the rivers flowing into the St. Lawrence (were reservoirs for hydro-electricity trap nutrients) is balanced by nutrient additions from Montreal, Quebec City, farming land, etc. The historical levels of nutrients in Gulf waters had remained remarkably constant. It would be advantageous to go only as far as secondary treatment, rather than

full tertiary treatment, and deliver the nutrients to the river, unless one wanted to employ all the hydro dams along the northshore.

A. (Mr. Gagnē) I don't think we have examined that question yet but I have no reason to doubt that what you are saying is correct.

A. (Mr Naud) Studies have probably been done on this subject, either at Rimouski or elsewhere. Our office has not yet examined this phenomenon. I think that tertiary treatment makes the water very clean and would considerably reduce the amounts of nutrients. On the other hand, primary treatment lets through toxins which it would be very helpful to stop somewhere.

A. (Mr Brosseau) Pollution is still pollution, whether it occurs before or after processing by a treatment plant. Even if primary productivity seems to increase as a result of nutrients which have been discharged from a primary, secondary or tertiary treatment plant, many experiments show a reduction in the amount of microscopic species. This means that the nutrients discharged from a sewage treatment plant will never replace those which arrive naturally from the point of view of conserving the natural balance of a receiving environment.

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4. "DEVELOPING A PROVINCIAL CONSERVATION STRATEGY"

"DEVELOPING A PROVINCIAL CONSERVATION STRATEGY"

Alistair D Crerar, in co-operation with Dave Buchwald and Archie Landals, gave a presentation on developing a provincial conservation strategy. A summary of their address was provided by Max McConnell.

Alistair Crerar, Dave Buchwald and Archie Landals took turns addressing what Mr. Crerar termed the "why", "what" and "how" of the World Conservation Strategy as applied to developing a provincial conservation strategy in their province.

Mr. Crerar discussed the report issued by the World Commission on Environment and Development, headed by Mrs. Brundtland, the former Prime Minister of Norway, and popularly know as the Brundtland Commission. He found the report on the Commission's mandate, key issues, strategies and work plans most interesting and impressive. He read the text of a letter he had written to the Secretary-General of the Commission, Mr Jim MacNeill, first congratulating him on the success of his approach in dealing with so many large groups, then offering critical comment on Item 28, which states that many issues that are regional or global in their impact are still handled as though they are primarily "domestic affairs", even population control, pollution, fisheries, energy, monetary policy.

Mr. Crerar pointed out that rather than considering this a weakness, it should be treated as a strength. Altruism is extremely helpful in tackling environmental problems, but the influence of self-interest is unlimited. It is initially important to establish the link between actions that will benefit an individual and his neighborhood, and regional and global concerns. As an example, he cited the effect replacing tropical rain forests with pasture has on the Canadian Prairies half a world away, by destroying the market for ruminants that are essential to keep some of the Prairies in grass, an essential ameliorative on some soils.

He found it heartening, he said, that in every attempt to solve a local problem, such as acid rain or soil degradation, it is necessary to rely on the cooperation of others.

The report mentions the connection between and among components of the environment, and the incapacity to put it altogether, in analytical and operational terms. In his view, it underestimates the importance of knowledge, which fosters greater understanding of the compelling reasons for becoming stewards of our brothers' environment.

Mr. Crerar stressed that without support from the development side-interests such as Chambers of Commerce, the Canadian Federation of Labor, the Canadian Manufacturers' Association and Unifarm - support from politicians, bureaucrats and environmental NGO members will be only a brittle shell. He noted that though the World Commission is holding a conference in Ottawa, which is correct from a constitutional viewpoint, the real responsibility for environmental decision-making lies mainly with the provinces. While the report stresses the link between environment and development throughout, and emphasizes in its alternative approach the lines between economic and trade policies and environment, working only "from the top down" will not be enough.

The utility of the World Conservation Strategy was not fully explored in the report. He outlined an experiment being undertaken by the Alberta Council, using the World Conservation Strategy structure, to link self-interest and local concerns with the need for national and international cooperation; to identify the common ground between environmental management and economic development; to elucidate the connectedness of things through practical examples; and to work "from the bottom up".

Alberta's Public Advisory Committee (PAC), which is made up of appointed representatives from interest groups in the province, is developing a Provincial Conservation Strategy with assistance from the Council's research division. The PAC includes most of the environmental groups, and also community, social and developmental

interests. Common interests are being identified and consensus built between such disparate groups as the Fish and Game Assocation. Since the Provincial Conservation Strategy is intended to fit within the national and world conservation strategies, it forces an outword-looking view, and broadens the perspective of the participants. It may convince them that the only way to achieve important aspects of a provincial conservation strategy is through support of national or world conservation strategies.

Mr. Crerar concluded by reiterating that a Provincial Conservation Strategy is necessary for three reasons: (1) the real responsibility for environmental conservation lies with the provinces; (2) it identifies the concerns shared by all, from the developer to the ecologist; (3) and makes it apparent that essential local objectives can only be archieved by supporting better conservation strategies elsewhere.

Mr Buchwald and Mr Landals then gave a definition of a provincial conservation strategy and outlined the procedures for implementing it.

Following Mr. Crerar's address, Mr. Buchwald outlined how the work is proceeding in Alberta.

The provincial conservation strategy project fits in with work that the Alberta Environment Council and the PAC have been doing for the past five or six years. During that time, the Alberta Council has held hearings on a range of subjects, and the PAC, divided into sub-components with diverse interests, has also been involved in many areas. The project offers a structure to bring together a number of issues into two groups, perhaps ultimately into one.

The complexity of the task did not become apparent until further reading of the World Conservation Strategy material. 450 agencies from more than 100 countries were involved in its preparation, and drafts

were reviewed by more than 200 experts. The international organizations stated as their aim the achievement of sustainable development through conservation of living resources. The three objectives were:

a) to maintain essential ecological processes and life support systems
b) to preserve genetic diversity
c) to ensure the sustainable utilization of species and ecosystems.

Mr. Buchwald identified two of the six major obstacles identified as most significant in Alberta: dealing with the belief that living resource conservation is a limited sector (i.e., the impossibility of compartmentalizing decision-making); and the failure to integrate conservation and development into all programs.

Mr. Buchwald said he understood that when the World Conservation Strategy was adopted by Canada in 1981, it received support from all the provinces except Ontario. He assumed that as soon as Ontario has an environmental council, there would be an immediate endorsement of the Strategy. He pointed out that initial steps can be taken not only by governments. For instance in Alberta, the impetus came from a Fish and Game Association representative on a resource study group.

Mr. Buchwald asked Mr. Archie Landals to explain how the study groups of the Public Advisory Committee function.

Mr. Landals asked the delegates to read the brochures provided, to get a picture of how the committees are structured and what they are doing, as well as the brochure provided on the Public Advisory Committee defining what a conservation strategies is.

The directions taken would depend on the decisions of the volunteer groups involved, but it had become apparent that the Conservation Strategy should become an exercise in education and consensus-building. For the first time, groups working on such diverse

problems as urban landfill, pollution, energy, the possible conversion of automobiles to natural gas, etc., were working in a way that put the issues into a common framework. When work first started with members from the various study groups, the first major obstacle was getting people to understand the magnitude of the task. The public attitude must be changed - people must look to sustainability of development, and understand the inter-relatedness of development and conservation. It is necessary to create a groundswell of support.

It was decided to develop the provincial conservation strategy from the perspective of the public first, Mr. Landals said, and then approach government departments and agencies. The subject had been chosen as the topic for the Annual Joint Meeting of the Public Advisory Committees, to be held in December, in the hope that this would generate publicity, get more organizations involved and allow them to provide the government departments with a context into which they could fit their programs.

Mr. Landals asked for responses to the list of questions which had been distributed before the meeting. The information gathered would be co-ordinated and sent back to everyone, to bring them up todate on work in other provinces. He promised to keep the Councils informed on Alberta's continued work on a conservation strategy, to make the task easier for others who might want to undertake it.

Mr. Dave Buchwald mentioned that two research officers were working as secretariat and support group to a steering committee set up within the Public Advisory Committee. The first step was to publish a brochure, intended to explain the World Conservation Strategy and lay a foundation for consensus-building. It was carefully worded to interest other sectors besides the environmental sector. A description of the process was forwarded to all organizations with memberships on the Public Advisory Committee, and members were encouraged to contact their representatives on the Public Advisory Committee, and feed information back.

A prospectus was now in the process of production, he said. It attempts to establish a relationship between the World Conservation Strategy and a proposed conservation strategy. It raises the concepts "development" and "conservation" in non-opposing terms, and hopefully broadens the information base. It will be revised, and approved by the advisory committees prior to the Annual Joint Meeting, to be distributed to interested organizations and individuals.

A resolution had come from the study group sponsoring the provincial conservation strategy, asking the government to direct the Alberta Environment Council to hold public hearings, after a draft strategy had been prepared by the Public Advisory Committees. The Annual Joint Meeting could accept, reject or modify that resolution.

Mr. Buchwald concluded by stating that the project had been broad enough to really stimulate the interest of those involved for the past nine months, most encouraging in light of past experience with volunteer groups. There had also been considerable support from other provinces.

Mr Junius then invited all the delegations present to comment on the presentation given by Messrs Crerar, Buchwald and Landals.

Ontario

Mr. Gallon commented that various levels of government had been kept informed through minutes of the various committees of the PAC. It was hoped to receive a fair share of government support. A number of government programs fit very well into the context of a conservation strategy, but in any meeting there is conflict between, for example, water resource engineers and environmentalists. The objective was to keep inevitable conflict constructive. He invited discussion and advice.

Mr. Guscott said that the original suggestion to develop a provincial conservation strategy came from Elmer Kure, of the Fish and Game Association. He recommended it as a positive way for other advisory councils to develop a consensus-building mechanism.

Mr. Gallon remarked that he was in Nairobi, Kenya, for four years during the development of the World Conservation Strategy, and that a couple of drafts were rejected by a Several countries, particularly third World countries, because there was emphasis on conservation and wildlife habitat maintenance but none on the human development component. Now, after its implementation, a number of countries are moving toward combining the needs of people with the preservation of wilderness areas and habitats. It was encouraging that Mr. Roberts Prescott Allan, the author, and Dr. David Munro, Secretary-General of the IDCN, were both now back in Canada.

Mr. Guscott then asked if he could clarify the situation in Ontario in relation to the World Conservation Strategy. It had been strongly endorsed at last week's CCREM meeting in Toronto by Mr. Bradley, the Ontario Environment Minister. Tentative steps towards provincial conservation strategy had been taken a year ago, when the provincial government, working through the environment and resource ministries, commissioned the Conservation Council of Ontario (an umbrella organization of twenty NGOs and industry) to prepare a study of how present policies fit the World Conservation Strategy. This evaluation by non-government groups was used to avoid the government agency bias which Mr. Buchwald mentioned as a concern. It was hoped to get an accurate report on how Ontario's natural resource and sustained-yield policies meet the intent of the World Conservation Strategy. Five Conservation Council members were working full-time on this, with back-up from five coordinators in the provincial government.

New Brunswick

(Mr LaPierre) A few years ago, we endorsed a World Conservation Strategy document, which outlined the goals of an environmental program and dealt with such factors as air, water and soil. In a way, it contained the guidelines for the Council's activities. More than 2,000 persons representing organizations interested in conservation were involved in the preparation of this public document which has become the cornerstone of our operations.

Nova Scotia

The Nova Scotia government, Mr. Haugg reported, may have endorsed a World Conservation Strategy, but he was not aware that anything had been done toward developing such a trategy. He himself was unaware of the topic until the material on it was received. The Environmental Council would promote familiarity with the topic among groups and sectors in the province.

Manitoba

Mme. Malley added that the document that was circulated was brought to the attention of the Manitoba environment minister, and he had furnished names of contact persons. It was hoped to take it to Council and stimulate a lot of interest. She had a question. "Where, in your wildest imaginings, do you think this might go? Do you think it will end up as legislation, or do you think it will simply influence social thinking?"

Mr. Rollo responded that one would hope it would become part of the school curricula, would become the context for environmental education, and - in twenty years - affect the way in which everyone looks at environmental matters.

Québec

Q. (Mr Guertin) The term "strategy" is very often associated with operational activities. In the last ten or twenty years, this concept has become so commonplace that, when someone lists the various components of a strategy, you get the impression that there are some hidden elements, aspects that will only be revealed once implementation begins. There seems to be a strategy behind the strategy. In the address we just heard, education was mentioned as one of the key elements underlying implementation of the conservation strategy; what are the others?

A. The business of having two scorpions in a bottle-one called "developers", and the other "ecologists" is not productive, Mr. Crerar said. There must be a better way of resolving problems than continuous confrontations. He remarked on the optimism prevailing in Alberta, because so much progress had been made in the past fifteen or twenty years toward environmental conservation. The gas business, in particular, he singled out as willing to take all kinds of approaches that cost money, to enable them leave an environment as good as it was before the gas and oil were extracted. Alberta law now requires that land be reclaimed to sustain an equal or better productivity. Development with conservation is achievable.

(Mr Junius) I believe I am speaking for all those present when I say that all councils convey an integral part of the conservation strategy to their governments in the opinions and reports they submit, although it may not be stated explicitly.

We are doing exactly that when we suggest to our respective ministers that the proper steps be taken to ensure harmonious development in keeping with environmental values. We are in step with the strategy when we recommend proper management of water, air and soil.

On the basis of Alberta's experience, I would say that we are working from the bottom up, rather than from the top down. I am delighted to see that it has been possible to unite so many volunteers and associations which, working together, have helped broaden support for the conservation strategy.

Canada

Mr. Beck then proceeded to relate how the Northern Conservation Task Force related directly to Canada becoming a signatory to the World Conservation Strategy. This was a federal initiative of the Department of Northern Affairs, with Environment and Fisheries and Oceans participating. The governments of the Yukon and Northwest Territories became equal partners in what was designed to give the two northern territories a conservation strategy. Mr. Beck was a member, along with other representatives of the public, federal and territorial public servants, political representatives or appointees, and members of industry. There were at least four strong scorpions in the same bottle, which made for interesting deliberations. However, a report was produced having as its basis the need for, and desire for, land-use planning in the two territories. Mr. Beck recommended it to anyone interested in a conservation strategy. Mr. Crombie, Northern Affairs Minister, and his counterpart in the Northwest Territories, had recently announced their intentions to follow up. Fisheries and Oceans had produced a Northern Marine Conservation Policy, and formed a group to pursue the designation of marine conservation areas in the Arctic, as a result of the Northern Conservation Task Force.

A Canadian, Jame Naysmith, was Executive-Director. He went to Nepal to work toward the development of a Nepalese conservation strategy, and a background paper on this work is available from the federal Council, Mr. Beck said.

A conference on the World Conservation Strategy would be held in May 1986, sponsored by the Canadian Wildlife Federation, the World Wildlife

Fund, and governments in Canada, in concert with the Brundtland Commission.

He concluded by asking for comments from his colleagues.

(Mrs Lepage) Following the Stockholm Congress, the Canadian Wildlife Service implemented a very concrete program by putting together the necessary resources to create Wildlife Habitat Canada. This may seem like a small step, but it represents an extremely important decision on the part of our country for the conservation of these habitats.

Dr. Conover then undertook to brief members on the situation in Newfoundland and Prince Edward Island, who were not represented at the Assembly. She said that Dr. David Munro had been in touch with both, so clearly there was a national effort to stir up provincial interest.

In Prince Edward Island, a member of a wildlife group told her that a number of provincial departments would have to be brought together to achieve a provincial conservation strategy, specifically mentioned was Parks, Fisheries & Wildlife, Forestry, Agriculture and Highways. He believed that government people were committed, but they needed an indication of support from people ouside government. They hoped the Island National Trust would mobilize the grassroots interest needed. He also made the point that there is a need to demonstrate an economic return to conservation, both short and long-term, to help to sell the proposal to the senior government level.

In Newfoundland, Dr. Conover found efforts fragmented in terms of lead departments for promoting conservation. The Lands and Forests group environmental quality was consistent with a conservation strategy. They have an environmental assessment process which provides for public input, but it is very elaborate, and problems are already apparent in that the process takes twenty-five months. The process is outside the conservation strategy, but it promises evolution in that area.

The more active role in conservation lies with the tourism and recreation people, who also look after wildlife and parks.

They are developing a wildlife policy which they believe will ultimately tie in with a provincial conservation strategy. Interest exists, and possibly within a year progress will have been made. Support is being sought from external agencies, and mention was made of the provincial Wildlife Federation, the Newfoundland Wilderness Society, and the Newfoundland Natural History Society.

Dr. Conover concluded by saying that the Alberta experience shows that the initiative for a conservation strategy provides a framework, where interests that were and are like scorpions in the bottle, have a chance to come together into something like an ant colony.

Next, Dr. Gardner reported for British Columbia. A group had been formed there to work on developing a conservation strategy. They had printed a brochure, and of the eight people named in it, he had identified a professor of ecology, a senior industrial forester, a federal Wildlife director, and a retired Director of Parks for the province, but no provincial government representatives. He said he regretted not having time to get more information. He doubted that the group had much government support as yet, but given the large number of NGOs and subsidiary groups there, he was confident that a lot of work would go forward in the next year.

Mr. Rowe reparked on Saskatchewan and said that Mr. Crerar's letter to the Department of the Environment had been mislaid, but they expressed great interest, and promised that action might begin soon.

He saw the World Conservation Strategy as helpful in mobilizing provincial and regional interest, but warned of what he called hidden bombs and pitfalls. Much would depend on the definition of the rather fuzzy terms "conservation" and "development". The thrust of the World conservation strategists was probably to apply the term"conservation" to renewable resources, but they did not say much about

non-renewables. He wondered what the term "development" means in reference to resources that have intrinsic worth as they are, such as wildlife. However, the Strategy would provide a good focus for exploring some of these difficult subjects.

Mr. Rowe reminded those present to watch for the 1985 report on implementation of the World Conservation Strategy to be produced by Environment Canada.

Q. (Mr Bundock) I would like to know how many countries have adopted the World Conservation Strategy. How many provinces are sufficiently advanced in this respect that we can say they have adopted this strategy?

A. Mr. Crerar replied that he did not know the number of countries. Some of the provinces had indicated that adoption of the Strategy would be a good thing, then filed it away. But real adoption means translating the strategy into action.

A critical element would be identifying sustainable development. Are hydro-electric dams sustainable over the long run? Is the Hoover Dam a renewable or non-renewable resource?

A. Mr. Beck said that the IDCN provides some what of an answer. More than 450 agencies contributed to the World Conservation Strategy. As of March, 1985, 32 countries had undertaken to develop conservation strategies and make them a working part of their government policies. In June of this year, the countries would come together to assess their progress. The Alberta effort would strengthen Canada's presence at the meeting and in the future.

Mr. Gallon said he was fascinated by the expression "wildest imagination" used earlier. He had recently found out that two five-acre ponds had been built as environmental control facilities.

One was plastic-lined and the other, for economic and engineering reasons, was clay-lined. It turned out that the plastic-lined one was tax-deductible, and the clay-lined pond was "just mud that we moved around".

Mr Junius thanked the speakers and then outlined the next morning's agenda. After discussing the matter, the participants decided to cancel the workshop on watersheds (workshop No 1) and incorporate the material into workshop Nos 2 and 3. Workshop No 3 would thus become workshop No 2 and workshop No 4 would become workshop No 3.

5. THE THREE WORKSHOPS

Workshop No 1

URBAN CENTRES AND INDUSTRY*

Moderator: Pierre S. Guertin
Secretary: Camille Rousseau

Participants: Maurice Clavette
David Guscott
Veena Halliwell
Donna McCready
Claudette Villeneuve

A) Summary by Mr Guertin

In an approach that is both comprehensive and simultaneous, it is very hard to monitor the various negative impacts of industrial and urban activities on the river environment. This great difficulty in wishing to identify and resolve all problems at the same time is tied essentially to the numerous activities generated by a few hundred cities, built along the St Lawrence or along watercourses that either run parellel to or empty into the river. The St Lawrence is also being polluted in various ways by some 6,500 industries which operate along its shores.

Then there are the problems associated with implementing controls; how can a comprehensive control and monitoring system be developed quickly? The committee members consider this to be a monumental task. The best approach may be to channel all available resources (limited

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* The official program indicated that workshop No 1 was to deal with watersheds; since this workshop had to be cancelled, workshop No 2 became workshop No 1, and so forth.

though they may be) in the fight against industrial and urban pollution. Perhaps most of our energies should be directed toward transformation activities rather than correcting the present situation.

This last point led the committee to distinguish between those urban centres and industries which are planning various transformations in the short term and those which do not have any immediate plans. The committee defined transformation as any significant change. For industry, this could be a change in production capacity or expansion of a particular component; in short, any change made to industry with respect to its present situation. For cities, this could include any urban renewal projects or expansion of a given area.

Cities and industries wishing to implement such transformations in the near future would be subject to current environmental standards. Thus, an industry wishing to expand in order to increase its production capacity should, for all its activities, meet the standards of the Department of Environment of the province in which it operates. The same applies to cities or towns wishing to implement urban renewal projects. Under this strategy, cities and industries not planning any transformations in the short term would have a maximum of ten years from the date on which the new regulations came into effect to comply; should they fail to meet this deadline, they would be subject to the appropriate sanctions set out in the legislation.

There were some questions raised as to the nature of these standards; however, the committee decided that this was neither the time nor the place to go into a technical discussion of environmental standards, and considered it preferable to stick to principles. It focussed on the following four:

1) Replacing physical access to the river by visual access.

2) Reversing the encroachment of cities and industries on the shores of the St Lawrence. Developments would be forced to retreat further inland to clear the first fifteen metres of the river.

3) Ensuring, during this process, that the shore zone is returned to its original state for all urban renewal projects and for some industrial renewal or expansion projects, in the case of cities and industries located near the St Lawrence.

4) Ensuring full control over effluents.

According to the committee, two components should be added to this strategy: the carrot and the stick, or reward and control. A licence or permit could be used as a sort of administrative measure to ensure that municipalities and industries complied with standards when implementing transformations, even partial ones. These licences could have various control and monitoring provisions as well as fines for infractions. As for the carrot part of the equation, an annual award would be set up for cities and industries complying with the standards of the Department of Environment in implementing their transformations; this award could be called the Advisory Council on the Environment award or the St Lawrence award.

Since all Canadian provinces have rivers along which most of their cities and industries are located, the components of this type of strategy could be applied in other provinces.

B) Proposals for the plenary session

In view of the problems involved in a comprehensive and simultaneous approach to environmental control for existing industries and cities, it was proposed that this approach be divided, and that industries or cities wishing to make changes or transformations be considered separately from those not prepared to make such changes at present. The former would be subject to current environmental standards, which would come into effect at the time of the transformations. The latter would have a maximum period of ten years to ensure that their facilities complied. The Department of Environment would issue licences that would serve as

a control mechanism for any transformations or construction projects and would ensure that urban areas and industries complied with regulations and standards.

In recognition of those cities and industries that complied with environmental standards, an annual award, called the Advisory Council on the Environment award or the St Lawrence award, would be set up.

C) Comments

(Mr Brosseau) I do not know whether I agree or disagree with these statements; however, I somehow feel I disagree. Let me explain. There is a sense of social fairness which will probably not be respected if the decision to comply with environmental standards is left up to the municipalities. I think it is very likely that Québec municipalities would not comply, thus setting us back ten years. However, I am prepared to fully endorse the committee's views, provided it is agreed that the needs are greater in certain areas and thus more action is required there than in other regions. For example, problems caused by sulfur dioxide emissions are more serious in Montréal than in Sept-Îles.

From this perspective, it seems clear that greater effort must be made in these areas than in the province as a whole. We could thus create a sort of experimental laboratory to further research applicable to a conservation strategy program. Since I consider the environmental standards established by our governments to be minimum standards, I cannot agree to an approach that does not propose to go beyond those standards.

Q. (Mr LaPierre) Are you not afraid that, if the municipalities had free rein with respect to standards, they would choose only those which involved no expenditures?

A. (Mr Guertin) The committee members feel that it is the responsibility of the Department of Environment and not the municipalities to determine standards.

Q. Since everyone is required to comply with the standards, to whom would an award be presented?

A. This should be left to the discretion of those responsible for the award. The ten-year deadline may seem very long when many cities and industries undertake partial transformations of their infrastructures (for example, a municipality which replaces its sewage system). However, ten years is a relatively short period in the life of a city founded two or three centuries ago.

Q. (Mrs Lepage) I find it difficult to imagine a municipality deciding which industries should be required to make immediate corrections to their facilities. The province of Québec has all the necessary regulations but it must show a willingness to enforce them.

A. (Mr Guertin) I completely agree with your point of view, except that the facts indicate that, in Québec, despite the current regulations, 85 to 90 per cent of all municipalities still do not have primary treatment for their waste water before it is dumped into a receiving body of water. Approximately half of those municipalities that have sewer systems with treatment capabilities have ineffective systems.

(Mr Clavette) Our committee clearly indicated that all new industries would be required to comply with current regulations and standards; other industries would be given ten years to comply. Moreover, industries or municipalities wishing to undertake any major changes would require a licence, to ensure the best possible control of

pollutants. The standards for this purpose should be developed by the provincial governments in consultation with their environment council.

(Mr Crerar) It is up to the provinces to decide on the pollution levels they are willing to tolerate. Since the municipalities are creatures of the provinces, I do not believe the provinces would have much difficulty forcing their municipalities to comply with their standards as the provinces have the power to grant or deny funds, depending on whether the municipalities comply. However, setting environmental quality goals is more difficult. To the best of my knowledge, Ontario is the only province that has taken action on this front. It has set water quality goals stating that all water in the province must be fit for fishing and recreational activities, including swimming. Fish will thus be able to go through the various stages of their life cycle in suitable water. Once the goals have been set, the means to achieve them must be implemented; this involves both human and financial resources.

Workshop No 2 FARMING AND FORESTRY

Moderator: Domingos de Oliveira
Secretary: Robert Carpentier

Participants: Tom Beck
Régent Brosseau
Alistair D. Crerar
Gary Gallon
Joseph A. F. Gardner
Morris Haugg
Diane Malley
Gisèle Pellerin
J. Stan Rowe
Don Smith
Helen Taylor

A) Summary by Mr de Oliveira

The workshop was divided into three parts: a presentation by the moderator, a discussion on the relationships between agricultural and forestry practices and their impact on the quality of the St Lawrence (river and gulf), and, finally, proposals for solving all these problems. The participants also summarized the steps taken in their respective provinces in this regard. It became clear from the discussions that there was a lack of information and popularization with a view to ensuring that producers knew what and what not to do to protect the environment, while continuing to operate in a cost-effective manner.

During his presentation, the moderator focussed on the problems of sediments being carried down the St Lawrence from various sources, particularly as a result of soil erosion and current agricultural practices. He specifically mentioned dissolved, and hence less perceptible, toxic products such as pesticides which enter the river by surface or subsurface drainage. He also pointed out that macronutrients, used in farming and forestry, cause an imbalance of the biocenosis in the St Lawrence, resulting in the increased development of certain vegetable and animal species to the detriment of others.

The participants' discussions revealed that farmers and forestry operators are aware of the risks of using pesticides, in terms of the quality of both the soil and the water. These producers know that there are ways of correcting the problem and are interested in learning about them and applying them; hence the need for adequate scientific popularization and information. These producers also want scientists to use language they can understand so that they can have a greater feeling of involvement.

Through appropriate grant programs, the provincial governments should help popularize and apply research findings. This application should be part of a comprehensive approach, taking into consideration all related aspects of the results other than the sectoral or intended goal. To this end, research must be conducted in a multidisciplinary context.

The popularization component must include communication between researchers and users, resulting in beneficial and stimulating aspects for both parties. In this way, producers will truly feel they are partners in the search for and application of solutions. Experts should also obtain information from users who work daily with the land. This requires education at all levels of society, particularly the grass-roots level. It is important to develop information networks by type of crop, and through demonstrations of in-field application, to show that it is cost-effective in the medium and long term to protect the environment.

At the same time, we must avoid or prevent the negative effects of the farming methods involved. We must therefore avoid seeking the benefits of very short-term production.

During development of provincial conservation strategies, it is of the utmost importance that emphasis be put on the strategic aspect of actions, namely the selection and proper balance of these actions. This will ensure a sensible and sustainable utilization of resources. The environmental protection aspect should be included in all government assistance programs in the fields of agricultural and forestry production. We must always seek and apply solutions or practices which are beneficial to farmers, forestry operators and the environment.

B) Comments

(Mr de Oliveira) Someone has just pointed out another aspect which I failed to mention: education of the public, particularly consumers. Consumers are, in fact, responsible for farmers' heavy use of pesticides, herbicides and fungicides. Thousands of kilos of these products end up in our watercourses. Consumers will continue to be largely responsible for this as long as they demand fruit and vegetables in impeccable condition. This might sound unrealistic, but we should perhaps look for fruit that has already started to be eaten by a worm or caterpillar; we would at least be sure that it can be eaten without any risk to our health. Such is not the case for fruit and vegetables that have a very nice appearance. If we were a little more tolerant in this respect, farmers would be less constrained by the demands of the market.

(Mr Mallory) I recently read that scientists in the food industry have noted that consumers are now demanding better-tasting tomatoes, whereas before they were looking for firmer tomatoes. Thanks to biotechnology, it is now possible to satisfy consumer tastes.

Workshop No 3 WETLANDS AND SHORE ZONES

Moderator: Charles D. Mallory
Secretary: Benoît Gauthier

Participants: Dave Buchwald
J.-Benoît Bundock
Shirley A.M. Conover
Lorne Giroux
Archie Landals
Louis LaPierre
Louise Lepage
Ian Rollo

A) Summary by Mr Charles D Mallory

We found very difficult to come to particular recommendations concerning aquatic environments. We started out around this issue but we indentified a large number of issues, each of which could have been a subject for at least a morning's discussion. I will give you a few ideas in this regard; the question of wetland management, the importance of species diversity, and poisoning from lead; there is the question of the role of public interest and the necessity of involving the public in any action to improve the situation; the question from Manitoba of water diversion and the potential impact of the introduction of foreign species into separate ecosystems; the impact of hydro developments, offshore oil and gas... Our whole approach concerning legislative protection as the way of providing a fundamental background for any kind of action on a local level was also brought into question.

On the other hand, there was a question of overriding importance: the idea of a world strategy for conservation and what is being done in this regard elsewhere in the world. There is of course the issue of basin management. It is clear that it was very difficult to get a quick focus on the issues.

Nevertheless the group was able to come to a consensus on certain issues. The first one was the idea of a conservation strategy and there are a couple of points that I could mention as to the value of the conservation strategy. First of all, it provides a coherent framework into which all the various issues relating to wetlands management (or of course other environmental problems) can be placed. So, it is a logical analytic tool that permits the treatment of these problems.

For the future generations, we must leave behind us a viable earth. An example one can give is the importance of the genepool. There are many "endangered" species that are now often referred to as "in the course of disappearing". One might wonder whether a disappearing species has in fact already lost the critical mass in its genepool and may be a lost species.

The discussion of this issue led us to a fundamental principle that we think should be adopted by all of the Councils across the country (where they exist), that we should advise our Ministers to adopt in principle the idea that there should be a provincial conservation strategy. That is the subject of the first of two recommendations.

An associated issue with this around which there was very wide agreement was the importance of the idea that Ministers of Environment should involve their colleagues in other departments whose mission is connected to environmental problems; this involves a multidisciplinary approach which undoubtely will slow down the decision making. A suggestion that was made in this regard was that there be interdepartmental committees at one level or another, perhaps cabinet committees, to deal with the issue.

We went on from there to talk about the role that Councils could have. It's fine to say that the Ministers should undertake a conservation strategy: but the various Councils in their own way should pursue this dossier as an active and "priority" issue in their own work, and not simply pass the buck to the Minister. Councils could participate in the development of a proposed strategy, or simply hound the Minister to get on with the job.

In this regard, it was also recognized that, as most Councils are not equipped with enormous ressources, we can benefit from specialization and exchange. This suggests an ongoing role for this association of Councils that we can profit by each other's experience. Thus, of one province focuses especially on forestry or agricultural issues, another might try to work on certain other areas. We could also experiment with different implementation techniques. One province might be looking at one process trying to make that work, while another may be attempting another kind of process. Exchanging information on this aspect also may save a lot of time. It is not really necessary for all of us to imagine developing a complete conservation strategy for each of our provinces, which as anybody who has thought about the problem for ten minutes is an incredible task, especially given the kind of resources that Environmental Councils generally find themselves with.

In connection with our discussion about wetlands, we see wetlands as something of an example of how this strategy issue can be implemented and as a test of the problems involved. For example, in the wetland question, many jurisdictions are involved in wetland management; it is really a zone that falls between land and water. It is an area which is either completely unattended and therefore subject to uncontrolled developments, or is overregulated and is subject to conflicting regulation, either of which makes coherent developments and coordination of protection plans particularly difficult.

I must say that it was the feeling of the people in the workshop that wetlands is perhaps the most critical issue: but of course, they have selected themselves as being particularly interested in this issue.

The argument may not stand up for people of other persuasion, but the wetlands have a critical biological role and should be an area to focus on in the development of a conservation strategy. There was a particular caution mentioned here that definitely applies to Quebec and may apply to another provinces: the idea of having a conservation strategy should not and must not be taken as a reason to slow down developments of appropriate policy for the wetlands.

To explain what I mean, we have sectorial strategies relating to forestry and agriculture in Quebec which have conservation elements in them, although they are at times in conflict: for example we are developing policies for wildlife protection which focus mainly on so-called economic wildlife. Of course, there also exists a federal policy on fish habitat and protection. What we see coming into place is a whole series of policies designed on a sectorial basis. In the case of Quebec, the strategy for the protection of the littoral and wetland areas in very close to realization and what we don't want is to have the Minister or his officials make the conclusion that what we are asking for is a comprehensive proposal which will take five to ten years to develop, and in the meantime, he doesn't have to do anything about actual protection. This is something to avoid.

The wetlands also typify the problem in another way, as national, provincial or local boundaries are rarely drawn according to biologically coherent zones. The concept of basin management is occasionally used but much more by exception than as a rule: and so, everywhere that one would be inclined to apply a basin management technique, one immediately comes into the jurisdictional issue, whether between two jurisdictions of the same level, i.e. different departments, or shared jurisdiction between different levels of government.

Thank you.

B) Proposals for the plenary session

Whereas the environmental advisory councils' objectives are the recognition and implementation of a conservation strategy, it is resolved:

1) that the environmental advisory councils, in their respective provinces, recommend that their minister adopt in principle the implementation of a provincial conservation strategy and that, to this end, the minister involve other departments affected by this strategy.

2) that the provincial environmental advisory councils give priority to the conservation strategy and, each in their own way, help ensure it is adopted.

C) Comments

Mr Junius invited the delegates present to comment on the merits of these proposals. New Brunswick, Manitoba and Alberta stated that they agreed in principle.

(Mr Guertin) I would like to make a personal comment. I feel that the second point should be discussed fully by our council since the World Conservation Strategy is an important issue which involves a number of unknown factors and commitments, the details of which I am currently not aware of.

(Mr. Giroux) My comments deal with the first part of the resolution. It seems to me that it is not really on the Minister of Environment of any province to adopt a strategy of conservation. For me, it is for a provincial government to adopt a conservation strategy on the recommendation of the Department of the Environment, because it seems to me that conservation strategy is much more needed in this province anyway by the Ministry of Lands and Forests or Resources, the Ministry

of Agriculture and all the other departments which are intervening on the environment.

My own point of view would be to rephrase it "that the Environmental Councils recommend that their Minister have adopted by their own provincial government a strategy of conservation" rather than asking the Minister to try to bring other departments into it. My feeling is that this should be a governmental decision for all departments of one province to act under such a strategy rather than having one minister, one department adopted and then trying to convince each and every one of the other departments to go along.

(Mr Bundock) I think that we should put a little more emphasis on the international aspect of the Conservation Strategy in our discussions. This subject clearly involves various levels - international, national, provincial and regional. I feel it is impossible to implement the Conservation Strategy without having first come to an agreement with those responsible for the development of policies and legislation. I would therefore suggest that we add a note recommending that the international aspect of the Conservation Strategy be better defined, with a view to subsequent incorporation into the councils' resolutions.

(Mr Junius) I would like to thank Mr Bundock for his suggestion. We will bear this in mind when drafting our final resolution. I also understand that all the delegations agree with Mr Giroux's suggestion that the Ministers of Environment "have adopted by their own provincial government a strategy of conservation".

6. DISCUSSIONS AND PROPOSALS

DISCUSSIONS AND PROPOSALS

Mr Junius first reminded the participants that the provincial conservation strategy was based on the World Conservation Strategy, the three main objectives of which are: a) to maintain essential ecological processes and life support systems; b) to preserve genetic diversity; c) to ensure the sustainable utilization of species and ecosystems.

Mr Junius then submitted for discussion the proposals endorsed by all the council chairmen present. The proposals, amended following various suggestions by the assembly, were then adopted unanimously. The final version reads as follows:

"At their Ninth meeting held at Quebec City, on October 10 and 11, 1985, environment councils of Canada considered the St. Lawrence River and its environment. They also analyzed the general principles that might form the basis for each provincial conservation strategy.

It is their conclusion that:

1. WHEREAS the St. Lawrence River system typifies several major river systems which are major sources of economic development for several provinces of Canada;

   WHEREAS the St. Lawrence River is representative of many diversified natural ecosystems essential to maintain life;

   WHEREAS the St. Lawrence basin constitutes a national heritage attesting to the art of man and to nature;

   WHEREAS the St. Lawrence River system has been subjected to long-term pollution and degradation;

THEREFORE, this Conference recommends:

That provincial governments, and the Government of Canada through its participation in the International Joint Commission, consider additional appropriate measures to reduce pollution of major watersheds and waterways to improve the quality of life, and the opportunities for sustained economic development, through the provision of adequate high quality water.

2. INSOFAR as provincial conservation strategies are concerned, it is the view of the environment councils of Canada, meeting in their ninth conference at Quebec city, that:

WHEREAS the development of provincial conservation strategies within the framework of National and the World Conservation Strategies have the potential to:

a) Identify those elements that are critical to the preservation of a quality environment;

b) Develop a consensus among both conservationists and developers on the values that they hold in common;

c) Identify those provincial environmental concerns that can only be solved by action on a scale larger than that encompassed by the provincial government unit, e.g., national, international or supranational.

THEREFORE be it resolved that provincial governments be urged to develop provincial conservation strategies, with the assistance of provincial environmental advisory councils including essential consultation with the public necessary for the development of a successful provincial conservation strategy.

7. CONCLUSION

NEXT ASSEMBLY OF ENVIRONMENT COUNCILS

Mr Crerar invited all the councils to hold their next assembly in Edmonton, Alberta. Although the exact date has not yet been confirmed, he suggested that it be held during the same period in 1986.

Closing remarks

Mr Junius thanked all those in attendance for their participation and invaluable co-operation during the meeting. He also expressed his gratitude to the staff and secretariat personnel of the Conseil consultatif de l'environnement du Québec for the great work they did in ensuring a successful Ninth Assembly of Environment Councils. He then invited everyone to the dinner being hosted by the Québec government and to the excursion to the Beauprê coast and Cap Tourmente the next day.

Mr Beck reminded the participants that, in December 1984, the chairmen of all the councils had agreed on the usefulness of holding these assemblies on an annual basis. He repeated his offer of the Canadian Environmental Advisory Council's co-operation in organizing future meetings. He added that CEAC would once again be prepared to hold the assembly in Ottawa. He again thanked Québec for this year's highly successful assembly, with specific mention of the great organizational skills involved.

Mr LaPierre, on behalf of the province of New Brunswick, expressed his thanks to the Québec Council.

Mr Guertin read the thought of the day, prepared by Dr Bundock, the dean of the participants: "We must learn to share if we wish to avoid the phantom of solitude".

The Ninth Assembly of Environment Councils of Canada was adjourned at 5:30 pm on October 11, 1985.

Québec City, November 14, 1985.

8. ANNEXES

Gouvernement du Québec
Conseil consultatif
de l'Environnement

TELEBEC

Code 1

FOR IMMEDIATE RELEASE

To environment editors, news desk officers and news directors

ENVIRONMENT

QUEBEC HOSTS ASSEMBLY OF CANADIAN ENVIRONMENT COUNCILS

(Québec City, October 9, 1985) - The province of Québec is hosting the Ninth Assembly of Environment Councils of Canada. For the first time, the Conseil consultatif de l'environnement will welcome representatives of other provincial environment councils and members of the Canadian Environment Advisory Council. The meeting will be held at the Château Frontenac in Québec City on October 10, 11 and 12.

During the three-day meeting, the councils will report on their activities since the last assembly. The participants will then discuss two themes of great environmental importance for Canada and Québec: "a provincial conservation strategy" and "tne St Lawrence and the environment".

The first theme - "a provincial conservation strategy" - will be discussed in the Canadian context, in light of the World Conservation Strategy put forward by the International Union for Conservation of Nature and Natural Resources (IUCN), at the instigation of the United Nations Environment Program (UNEP) and the World Wildlife Fund (WWF).

The second theme - "the St Lawrence and the environment" - will be examined as a typical illustration of an environmental problem for which a conservation strategy would be useful. This example

is designed to stimulate the interest of the other Canadian participants with a view to developing more appropriate and effective actions in a complex ecosystem.

During the first day of the conference, there will be discussions on the two main themes. On the second day, the participants will hold workshops in which they will examine the following issues: watersheds, urban centres and industry, farming and forestry, and wetlands and shore zones.

The Ninth Assembly of Environment Councils of Canada should enable the participants to develop a common position on a provincial conservation strategy. This position will then be subject to the deliberations of the councils and could eventually lead to a recommendation in this regard to their respective ministers.

The Québec Minister of Environment, Mr Adrien Ouellette, will preside over the closing dinner hosted by the Québec government.

Six provinces have an environment council. The Conseil consultatif de l'environnement du Québec was created in 1972; it celebrated its tenth anniversary as an active body in 1984.

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Source: Marcel Junius, Chairman
Conseil consultatif de l'environnement
Tel.: (418) 643-3818

PROGRAM

Thursday, October 10th, 1985

09:00 Château Frontenac Hotel – Ballroom

Opening of the ninth meeting of the Conference of Canadian Councils of Environment and representatives of provinces and territories. Remarks by the President of le Conseil consultatif de l'environnement du Québec (CCEQ), Mr. Marcel Junius

Reports by the representatives of various Councils and other representatives

10:15 Coffee-break

12:15 Lunch

14:15 Ballroom – Address by Mr. Jean Gagné, Secrétariat à la mise en valeur du Saint-Laurent on «*Le fleuve Saint-Laurent et l'environnement*»

Discussion

15:45 Coffee-break

16:00 Address by Mr. Alistair D. Crerar, Chief Executive Officer of Environment Council of Alberta on a «*Provincial Conservation Strategy*»

Discussion

18:00 Cocktail given by le Bureau d'audiences publiques sur l'environnement at the Vieux Séminaire de Québec

Friday, October 11th, 1985

09:00 Château Frontenac Hotel – Ballroom

09:15 Workshops on the two themes of the Conference

Workshop no. 1 Salon Montcalm
«*Bassins versants*»
Moderator:
Régent Brosseau
membre, CCEQ

Workshop no. 2 Salon Annexe Montcalm
«Villes et industries»
Moderator:
Pierre S. Guertin
membre, CCEQ

Workshop no. 3 Salon Québec
«*Agriculture et sylviculture*»
Moderator:
Domingos de Oliveira
membre, CCEQ

Workshop no. 4 Ballroom
«*Habitats humides, littoral*»
Moderator:
Charles D. Mallory
membre, CCEQ

12:15 Lunch

14:00 Château Frontenac Hotel – Ballroom

Continuation of the Conference in plenary session

Returns of workshops

Discussion

Recommendations

Sundries

17:00 Closing of the ninth Conference

19:30 Dinner given by the Province of Québec, Mr. Adrien Ouellette, Minister of Environment, presiding

Saturday, October 12th, 1985

09:15 Departure from the Château Frontenac Hotel by bus

Itinary: Montmorency Falls (Altitude, 90 meters). Avenue Royale through Ange-Gardien and Château-Richer parishes, first settlements. Stop at Petit Pré mill. On to St-Joachim parish church and therefrom to la Grande Ferme and le Petit Cap for a light lunch.

Visit of La Petite Ferme at Cap Tourmente National wild life area in order to watch the wild geese. Comments to be provided by la Société linnéenne du Québec

17:00 Arrival at Château Frontenac Hotel

CANADIAN COUNCILS OF ENVIRONMENT CONFERENCE

NINTH MEETING

CHÂTEAU FRONTENAC, QUÉBEC

OCTOBER 10, 11 AND 12, 1985

Québec